

# SOUVENIR



2nd Annual National Conference of
Association for
MEDICAL UPDATES

14<sup>th</sup> - 16<sup>th</sup> December, 2018

**AMUCON 2018** 



Organised by: GEETANJALI MEDICAL COLLEGE & HOSPITAL, Udaipur (Raj.)



या कुन्देन्दुतुषारहारधवला या शुभ्रवस्त्रावृता या वीणावदण्डमण्डितकरा या श्वेतपद्मासना या ब्रहमाच्युतशंकरप्रभृतिभिर्देवः सदा पूजिता सामां पातु सरस्वति भगवती निः शेषजाड्यापहा



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## Editorial Board

Dear Friends, Colleagues, and delegates, Greetings on behalf of organizing committee Wish you all a fulfilling and academically satisfying year ahead

I am glad that we have this opportunity to organize the 2nd Annual Conference of Association for Medical Updates on 14th – 16th December, 2018. I take this opportunity to welcome learned speakers, delegates and their spouse coming to Udaipur from all parts of country.

The goal of this conference is to provide a forum for interchange of knowledge and updates from various branches of medical field. Researchers from different field are invited to gather and present their work amongst fellow medical professionals. Research, updates and knowledge from this conference and souvenir is expected to spread and get imbibed into different strata of medical field.

This souvenir is the result of efforts of the whole editorial team and the organizing team. We thank all our well wishers and supporters without whom it would be an impossible task.

Once again on behalf of the members of organizing committee I extend a warm welcome to all of you and hope you will enjoy the academic fiesta at this conference as well as going through the souvenir.



Dr Jitendra Jeenger



Dr Apurva Agrawal



**Dr Arvind Yadav** 



Dr Meenu Pichholiya

### Souvenir





# The Souvenir is presented on the occasion of

## 2nd Annual National Conference of Association for Medical Updates



Geetanjali Medical College & Hospital, Udaipur 14<sup>th</sup> - 16<sup>th</sup> December, 2018



#### Organizing Committee

#### 15 DECEMBER: SCHEDULE DAY – 1

 $9.00\,\mathrm{am}-9.30\,\mathrm{am}$  : Registration and Breakfast

9.30 am -11.00 am : Symposium: Allergy: Let's find Solution

• Skin Allergy: Diagnostic and Therapeutic Updates

• Food Allergy: Diagnostic and Therapeutic Updates

11.00 am - 11.30 am : **Guest Lecture 1** 

• Prescriptions: Legal Complications

and Solutions

11.30 am - 12.00 Noon : **Guest Lecture 2** 

Recent Advancement in Cardiac Bio-

markers

 $12.00 \operatorname{noon} - 1.30 \operatorname{pm}$  : INAUGURATION

 $1.30 \,\mathrm{pm} - 2.30 \,\mathrm{pm}$  : Lunch

2.30 pm - 5.30 pm : • Best Paper AMUCON 2018

Young Scientist Award Session

• Hall A, B & C:

Free Oral Paper Presentation

#### 16 DECEMBER: SCHEDULE DAY - 2

 $9.00\,\mathrm{am} - 9.30\,\mathrm{am}$  : Breakfast

9.30 am - 9.45 am : **Preliminary Quiz round** 

9.45 am – 10.30 am : Guest Lecture 1 : Stem Cells : Future of

Therapeutic Interventions

10:30 am - 11:00 am : Guest Lecture 2 : Internet Addiction : Is

it a Disorder?

11:00 am to 11.45 am : **Poster presentation session** 

12:00 am to 12.45 pm : Final Round : Quiz for post graduate

students

12:45 pm to 1.30 pm : Validatory Function

 $1.30 \,\mathrm{pm} \,\mathrm{to} \, 2.00 \,\mathrm{pm}$  : Lunch





Dear Dr. Ashish Sharma,

It is a matter of pleasure for me to note that the Geetanjali Medical College & Hospital is organizing the 2nd Annual National Conference of Association for Medical Updates at GMCH from 14<sup>th</sup> to 16<sup>th</sup> December, 2018.

It is also heartening to note that in these three days' conference, about 250 delegates from all over the country would be participating.

I wish all the success to organizing team of  $2^{nd}$  Annual National Conference of Association for medical Updates.

**J.P. Agarwal** *Chairperson*Geetanjali University





It gives me pleasure to learn that Geetanjali Medical College & Hospital are going to organizing the 2<sup>nd</sup> Annual National Conference of Association for Medical Updates on 14<sup>th</sup> to 16<sup>th</sup> Dec. 2018.

The theme of the conference - Paradigm of Modern Medicine, is relevant to the current research and development in medical field.

I am sure in the presence of expert speakers around the country, this conference will provide new perspectives for addressing basic and clinical questions and would workout future direction for research in this area.

I extend my heartiest congratulations to the organisers and wish amucon 2018 all success.

Dr. R. K. Nahar

Vice Chancellor Geetanjali University, Udaipur



It gives me immense pleasure to know that the Deptt. of Biochemistry, Geetanjali Medical College & Hospital, Udaipur is organizing the 2<sup>nd</sup> Annual National Conference of Association for Medical Updates on 14<sup>th</sup> to 16<sup>th</sup> December 2018 at Geetanjali Medical College & Hospital, Udaipur.

I extend a warm welcome to all esteemed guests, learned delegates and faculty members.

The medical science and technology is developing so fast that it is essential for the doctors to keep themselves updated in this field. I firmly believe that such conferences and CMEs can reduce the gap between doctors and knowledge, and their academic activities also provide the platform to exchange the views with the other colleagues for improvement in medical profession.

I wish the conference a great success and a memorable event.

Dr. F. S. Mehta
Dean
GMC, Udaipur







Dear Dr. Ashish Sharma,

The Department of Biochemistry of Geetanjali Medical st College & Hospital is organizing the 2<sup>nd</sup> Annual National Conference of Association for Medical Updates at GMCH on 14<sup>th</sup> & 16<sup>th</sup> December, 2018 and I am glad that about 250 Delegates from all over the country would be participating in this three days conference. It is heartening to note that the Souvenir is being published in commemoration of the occasion.

I take this opportunity to congratulate you and your team members and wish the AMUCON 2018 a grand success.

Ankit Agarwal

Executive Director GMCH, Udaipur





On behalf of the organizing committee. I would like to express my deep sense of gratitude to all the delegates, who are coming from various parts of the country, for accepting our invitation to attend the conference. I extend a hearty welcome to you all. It is indeed a proud moment for all of us to be organizing this mega academic event in our institution.

I am sure all of you will cherish your stay at lake city Udaipur, the city not only known worldwide for lakes, fort, beauty but also for its warmth, well come & hospitality.

After all the hard days work we have great gastronimic feast to tickle your taste buds mixed with great entertainment to make your stay at Udaipur, most memorable.

**Dr. Ashish Sharma** *Organizing Secretary*AMUCON-2018, UDAIPUR







# CLINICAL EFFICACY OF ISOBARIC ROPIVACAINE ALONE, WITH FENTANYL AND WITH DEXMEDETOMIDINE IN SPINAL ANAESTHESIA FOR VAGINAL HYSTERECTOMY: A PROSPECTIVE RANDOMIZED DOUBLE BLIND CASE CONTROL STUDY

#### Dr. Ajay Kumar Jain

Resident, Anaeasthesia, RNT Medical College, Udaipur

**Background**: Aim of this study was to assess the clinical efficacy of 4 ml of 0.75% ropivacaine alone, with 25mcg fentanyl or with 5mcg dexmedetomidine in spinal anaesthesia for vaginal hysterectomy regarding sensory and motor block characteristics, success rate, haemodynamic profile and complications.

Methodology: Present study was conducted in a randomized double blind fashion on 105 ASA physical status I-II patients posted for vaginal hysterectomy. The patients were randomly divided into three groups of 35 patients each, using sealed envelope technique. GROUP R: Patients received 4 ml 0.75% Isobaric Ropivacaine. GROUP RF: Patients received 4 ml 0.75% Isobaric Ropivacaine with 25μg Fentanyl. Group RD: Patients received 4 ml 0.75% Isobaric Ropivacaine with 5μg Dexmedetomidine. We evaluated whether addition of fentanyl or dexmedetomidine to intrathecal ropivacaine could make a significant effect on onset and duration of analgesia, sensory and motor block.

Results: Isobaric Ropivacaine [4 ml 0.75% (30 mg)] alone, with fentanyl (25mcg) or with dexmedetomidine (5µg) in spinal anaesthesia produced effective sensorymotor blockade of sufficient duration with stable hemodynamic profile to accomplish vaginal hysterectomy. Addition of fentanyl (25 mcg) offered the advantage of accelerating the sensory onset and prolonging the duration of analgesia and sensory block without affecting motor block; whereas addition of dexmedetomidine (5 mcg) produced much longer duration of analgesia along with significantly prolonged motor and sensory block as compared to fentanyl.

**Conclusion:** Owing to early recovery in motor functions and lesser cardio-neuro toxicity, ropivacaine seems to be a good option for spinal anaesthesia.



# A COMPARATIVE ANALYSIS OF TWO TREATMENT REGIMENS FOR THE TREATMENT OF ENDOMETRIOSIS: A PILOT STUDY

#### Amiya<sup>1</sup>, Kaushal J<sup>2</sup>, Singhal SR<sup>3</sup>

1. Resident, 2. Professor, Department of Pharmacology 3. Senior Professor and Unit Head Obstetrics & Gynaecology, Pt. B.D.Sharma PGIMS, Rohtak, Haryana

**Background:** Endometriosis is a common chronic gynaecological disorder in women of reproductive age with prevalence of 6–10%. It is a common cause of chronic pelvic pain, dysmenorrhea, dyspareunia and dyschezia. It is a potential risk factor for infertility & dysfunctional uterine bleeding. Progestins help in treatment of endometriosis by causing anovulation and hypo-estrogenic state.

**Objective:** This study aimed to assess and compare the efficacy and safetyof dienogest versusmedroxyprogesterone acetate(MPA) in endometriosis.

Methodology: A pilot studyof 12 weeks was conducted on 30 patients. Patients diagnosed with endometriosiswere randomised to receive Dienogest, 2 mg OD (Group A, n=15) & Medroxyprogesterone acetate, 10 mg BD (Group B, n=15). Efficacy was assessed using VAS scale, Cyst size on ultrasonography and Clinical global improvement-impression (CGI-I) scale. Quality of life was assessed using Endometriosis health profile-30. The safety was evaluated by observing adverse drug reactions (ADRs).

Results: Both the groups led to statistically significant reduction in VAS Scale for chronic pelvic pain, dysmenorrhea and improvement in CGI-I scaleover a period of 12 weeks. Better reduction of VAS Scale for chronic pelvic pain(92.69% vs 83.67%), dysmenorrhea (96.47% vs 91.18%), size of cyst on USG (28.25% vs 21.26%) and improvement of CGI-I scale(68.97% vs 62.90%) was observed in group A than group B.However, this difference was not statistically significant. Both the groups led to statistically significant improvement in EHP-30 pain scale, control and powerlessness scale, social support scale. Uterine bleeding and weight gain were the commonest ADRs.

**Conclusion:** Dienogest as well as MPA showed good results for improvement of endometriosis but slightly better response was observed with dienogest.



#### COMPARISON OF EFFICACY OF TWO TECHNIQUE; NEBULIZATION VERSUS TRANSTRACHEAL INJECTION WITH LOCAL ANAESTHETIC FOR AWAKE FIBEROPTIC INTUBATION

#### Dr. Anil Kumar Bhiwal

Assistant Professor, Anaesthesia, Geetanjali Medical College And Hospital, Udaipur

**Background**: Awake fiberoptic intubation is the gold standard for anticipated difficult intubation in maxillofacial surgery. Topical anaesthesia of the airway is essential for awake fiberoptic intubation.

**Objective**: The aim of this study was to compare the efficacy of two technique; nebulization and transtracheal injection by local anaesthetic for AFOI

**Methodology**: This prospective randomised double blind study was done on 60 patients of age more than 18 years, ASA PS I-III undergoing maxillofacial surgery who required nasal intubation and has anticipated difficult intubation. Patients were divided into two group; Group T received transtracheal injection with 4ml of 4 % lidocaine and Group N received nebulisation with 4ml of 4% lidocaine. Time taken to intubate the patient, ease of intubation assessed by cough and gag reflex score, patient comfort score, patient satisfaction score and hemodynamic changes were recorded and compared. The data were presented as mean  $\pm$  SD, median and range. Statistical analysis was done by student t-test and chi-square test as appropriate. P value < 0.05 was considered statistically significant.

**Results**: Time taken to intubate the patient was significantly less in Group T (131.27±71.81 sec) then Group N (220.97±102.45 sec); (p=0.00013). Ease of intubation, patient comfort and patient satisfaction score were significantly better in Group T as compared to Group N (P=0.0023,0.0018,0.00001) respectively.

**Conclusion**: Transtracheal technique was faster, easier with better patients comfort as compared to nebulization technique for providing topical anaesthesia for AFOI.



# CLINICAL OUTCOME OF PLATELETS RICH PLASMA (PRP) INJ. IN VARIOUS STAGES OF FROZEN SHOULDER/ADHESIVE CAPSULITIS

Dr Vinay Joshi, Dr. Ashish Gaur

Orthopaedics, R.N.T. Medical College, Udaipur

**Background:** Patients of frozen shoulder in various stages are being treated by various modalities, including conservative and surgical measures. Both modalities of treatment have certain limitations and differential outcomes, Ideal treatment method are still doubtful. This study includes clinical outcomes of PRP Inj. in frozen shoulder.

**Objectives:** To study the management of periarthritis shoulder (frozen shoulder or adhesive capsulitis) by autologous platelet rich plasma PRP concentrate injections and to assess the results of above procedure in terms of benefits and complications.

**Methodology:** Randomly 50 patients of 40 to 60 year of age of both sex of various stages of frozen shoulder are selected for PRP injection within the period of October- 2017 to march 2018 and follow up for next three months.

**Results:** All the patients followed up for 3 months at subsequent interval of 1 week, 1 month and 3 months. They underwent 2 consecutive PRP Injection at 2 week interval, we measured pain, function, ROM, by visual analog scale (VAS) and Disabilities of arm, shoulder & hand (DASH), questionnaire and Goniometer. Pain according to VAS in pre procedure period was (8.65 + 0.92) (mean+ SD) with P value of < 0.001 at 1<sup>st</sup> week post PRP Inj. It was 5.76 +2.55, followed by one month post PRP 3.96 + 3.13 and at 3 month post PRP it was 3.12 + 3.62.

Forward flexion in degree during pre PRP stage it was 52.3 + 20.92 (Mean + SD) with P value <0.01 (s) at post PRP at 1st week it was 72.3 +24.97, at post PRP at one month 86.9 + 31.5, and at 3 month post PRP 98.9 + 42.16.

On the time of final follow up at 3 month, excellent result were achieved in 15 patients (30%) good in 20 patients (40%) fair in 10 patients (20%) and poor in 5 patients (10%).

**Conclusion:** PRP injection effective in improving frozen shoulder clinically compare to conservative and semi invasive procedures.



# CORRELATION OF CLINICO-MORPHOLOGICAL PATTERN AND ETIOLOGY OF BALANOPOSTHITIS IN PATIENTS ATTENDING DERMATOLOGY OPD

Dr Dileep Saugat, Dr Manish Jain, Dr Asit Mittal Skin, RNT Medical College, Udaipur

**Backgroud:** Published studies describing the etiological diagnosis of balanoposthitison the basis of clinico-morphological patterns are scarce. Also adequate data about prevalence and etiology of balanoposthitis amongst Indian population is lacking. This is important in context of our country where resources are poor and diagnosis relies chiefly on clinical diagnosis.

**Objectives:** We conducted this study to determine burden of balanoposthitis and correlation between various morphological patterns and etiological diagnosis ofbalanoposthitis.

**Methodology**: All male patients presenting with genital complaints to the Dermatology OPDduring the study period of 8 months were screened for balanoposthitis. A detailed history, examination, routine and relevant bedside diagnostic tests were performed.

Results: 129 patients of balanoposthitis were studied. Common morphological patterns were fissuring over prepuce (39.5%), erosions/ confluent wet erythema with subpreputeal discharge (31%), superficial pustules (26.4%), phimosis (22.5%) and patchy dry erythema (13.9%). Common causes of balanoposthitis were candidiasis (33.3%), herpes genitalis (11.4%), bacterial balanitis (17.1%), irritant balanitis (13.3%), fixed drug eruption (8.6%) and genital LSA (6.7%). Superficial pustules (85%) correlated best with candidiasis, irregular confluent erosions with subpreputeal discharge (77.7%) with bacterial balanitis and recurrent irregular erosions (91.6%) with herpetic balanitis.

**Conclusion**: Balanoposthitis is a common genital condition and certain morphological patterns can be a strong pointer towards final diagnosis which can be helpful in quick diagnosis and early institution of treatment.



# ROLE OF TRANEXAMIC ACID IN REDUCING POSTOPERATIVE BLOOD LOSS AND TRANSFUSION REQUIREMENT IN PATIENTS UNDERGOING HIP AND FEMORAL SURGERIES

#### Dr. Dinesh Chand Meena

Resident, Anaesthesia, RNT Medical College, Udaipur

**Backgroud:** Pharmacological agents are used to reduce postoperative blood loss.

**Objective**: To assess the effects of tranexamic acid on prevention of bleeding and requirement of blood transfusion after major hip and femoral surgeries.

Methodology: A prospective, randomized, double blinded study was conducted in the tertiary care teaching hospital. Ninety ASA grade I-II patients undergoing hip fracture surgery were included in this prospective study. Fortyfive patients received tranexamic acid (TA) given in a bolus dose of 500 mg 15 min before surgical incision followed by continuous infusion. The remaining, 45 patients were allocated as a control group. Postoperative bleeding (volume of blood in the drain), percentage fall of hemoglobin, transfusions and complications were recorded.

**Results:** Mean volume of blood in the drain was  $39.33\pm10.09$  ml (mean $\pm$ SD) as compared to  $91.11\pm17.61$  ml in placebo group showing a P<0.001. Mean percentage fall in Hb at day 0 was  $2.99\pm3.45$  in the study group as compared to  $7.70\pm6.05$  in the placebo group (P<0.001), and fall at day 2 in the study group was  $0.35\pm0.74$ , compared to  $2.72\pm2.70$  in the placebo group (P<0.001). The number of patients required blood transfusions were lower in the study group than in the placebo group (P=0.01).

Conclusion: We conclude that tranexamic acid significantly reduces postoperative blood loss and transfusion requirements during major hip and femoral surgeries.



#### A STUDY ON CLINICAL PROFILE AND OUTCOME OF RODENTICIDE POISONING IN PATIENTS ADMITTED TO A TERTIARY CARE TEACHING HOSPITAL IN JHALAWAR, RAJASTHAN

Dr. Khushala Ram Choudhary<sup>1</sup>, Dr. R. N. Meena<sup>2</sup>, Dr. O. P. Patidar<sup>3</sup>
1. Resident, 2. Associate Professor, 3. Professor;
Medicine, Jhalawar Medical College Jhalawar

**Background:** Poisoning is a significant global public health problem causes more than 2 lakh death every year. Rodenticide poisoning is one of the major types of poisoning prevalent in India. However this broad category consists of different type of compounds with different mechanisms of toxicity and variable mortality rates.

**Ojectiive:** To study the clinical profile and outcome of patients admitted with rodenticide poisoning at JMC, Jhalawar.

Methodology: A prospective study was conducted on 97 rodenticide poisoning patients who had admitted in JMC, Jhalawar during study period. After taking written consent, the information pertaining to the cases including history, clinical profile, investigation, management and outcome were collected and recorded on a pre-designed proforma. The clinical profile was recorded according to the Poisoning Severity Score grading. The MELD score was calculated using the original Mayo Model calculator. A CBC, RFT, LFT, PT, ECG were done for all the patients.

**Results:** Out of 97 cases, 41(42.3%) were female and 56(57.7%) were male. Majority of the patients were in 18 to 40 year age groups (82.5%). The poisoning severity score at admission was 3 in 42 cases (43.3%), 2 in 34 cases (35.1%), 1 in 21 cases (21.6%). Out of 97 patients, 74(76.3%) cases had survived, 23 cases (23.7%) died while 05 cases (5.2%) were discharged against medical advice. The mean value of MELD score in survivalwas 40.52 while in non-survival patients was 11.7.

**Conclusion:** Rodenticide poisoning causes mortality in 23.7% of cases. MELD score can be used as a reliable prognostic indicator in patients with hepatotoxic rodenticide poisoning.



#### SPECTRUM OF ACUTE LEUKEMIAS AND EXPRESSION OF ABERRANT MARKERS: A STUDY OF 456 CASES WITH IMMUNOPHENOTYPING

Dr. Mohit Punjabi, Dr. Nidhi Sharma, Dr. Sandhya Gulati
Pathology, SMS Medical Collage Jaipur

**Background:** Acute leukemia is a heterogenous disease having diverse immunophenotypes. Flowcytometry is a valuable tool for the diagnosis, classification, staging and monitoring of acute leukemia. Immunophenotyping by flowcytometry is essential for diagnosis of myeloid and lymphoid subtypes. There are several data on the incidence of aberrant markers and dissimilar results have been reported by different groups.

**Objectives:** Purpose of the study was to evaluate the role of flowcytometry in diagnosis of acute leukemias and calculate incidence of aberrant phenotypes.

**Methodology:** 456 patients of acute leukemias diagnosed in the Department of Pathology, SMS medical collage Jaipur, during Jan 2015 to June 2018 were retrospectively analysed by multiparametric flowcytometry using a panel of monoclonal antibodies (MoAbs).

**Results:** 456 individuals were worked up for acute leukemia. 269 (59%) cases of ALL and 187(41%) cases of AML were found ,of which 233 (51%) cases of B-ALL and 36 (7.8%) cases of T-ALL were found. Aberrant phenotypes were found in 21 (11.3%) cases of AML. CD7 was the most frequent lymphoid associated antigen found in 18 (9.62%) of AML cases. Aberrant expression of CD7 is highly significant by Fischer's exact test (P< 0.0001).

**Conclusion:** Flow cytometry is useful in correct diagnosis and subclassification of acute leukemia and we conclude that aberrant phenotypes are present in a great majority. Future studies will be directed to correlate these markers with prognosis and therapeutic response.



# CURRENT PRACTICES OF CERVICAL RIPENING AND INDUCTION OF LABOUR IN CASES OF INTRAUTERINE FETAL DEMISE: AN OBSERVATIONAL STUDY

#### Dr. Nirav Patel, Resident

Obstetrics and Gynaecology, GMERS Medical College, Sola, Gujarat

**Background:** Objective of the current study was to find the most effective method of induction of labour in cases of Intrauterine fetal death (IUFD), with efficacy described as least induction to delivery time, and to find the agent which has best safety profile, i.e. least maternal complications.

Methods: This was a prospective observational descriptive study carried out between January 2018 to October 2018.100 consecutive cases of IUFD after 20 weeks of gestation requiring induction of labour and fulfilling necessary inclusion criteria were selected. The method of induction decided by each consultant was noted and results were analyzed. As this was a purely observational study, all agents used for induction of labour (misoprostol, dinoprostone gel, intracervical Foley catheter).

**Results:** The induction-to-delivery interval was shortest with Dinoprostone (12.52 hours) followed by Foley (13.28 hours) and misoprostol (15.82 hours). However, the p-value (0.301) was not statistically significant. No significant complications were associated with any of the methods. Hence, we cannot comment on the best method of induction in cases of IUFD in this study.

Conclusions: Dinoprostone gel, misoprostol and Foley catheter are safe for induction of labour in all cases of IUFD, even those with previous one or more lower segment cesarean section (LSCS) with IUFD. Misoprostol was more commonly used in second trimester while dinoprostone gel was most commonly used in third trimester.



# ANAEMIA IN PATIENTS OF RHEUMATOID ARTHRITIS AND ITS CORRELATION WITH DISEASE ACTIVITY

#### Dr Ashutosh Dudhatra, Dr Sanjay Paliwal

Medicine, Geetanjali Medical College, Udaipur

**Introduction**: A normochromic, normocytic anemia often develops in patients with Rheumatoid Arthritis (RA) and is the most common hematologic abnormality.

**Objective**: The aim of this study is to detect frequency and type of anaemia in patients of RA and to establish relationship between haemoglobin level and disease activity in RA.

**Methodology**: A total of 59 patients fulfilling 2010 ACR/EULAR criteria and having disease duration of less than 1 year were included in this study at GMCH, Udaipur. Disease activity was assessed by DAS-28 score. Haemoglobin levels were measured.

Results: Total of 67.80% patients were anaemic. Among anaemic patients, 55% patients had anaemia of chronic disease, 27.50% patients had Iron deficiency anaemia, 10% patients had vitamin B12 deficiency and 7.50% patients had combined IDA and vitamin B12 deficiency. Duration of disease, rheumatoid factor positivity and occurrence of erosive disease were not significantly different among anaemic and non-anaemic patients (p>0.05 for each). Mean ESR (p>0.02) and DAS-28 (p>0.001) were statistically significantly different among anaemic and non anaemic patients. Haemoglobin level had significant negative correlation with disease activity (DAS28) in RA cases (r -0.5533, p <0.0001).

**Conclusion**: Anaemia, particularly anaemia of chronic disease is seen in higher frequency in RA patients. Haemoglobin had significantly negative correlation with disease activity in RA.



# PROGNOSTIC SIGNIFICANCE OF TOTAL LEUCOCYTES COUNT IN ACUTE ISCHEMIC STROKE

#### Dr Dinesh Kr Tiwari

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**Background:** Experimental models of stroke have shown that within minutes of onset of focal ischemia there is activation of microglia followed by increased trafficking of leucocytes into the ischemic territory.

**Objective:** To estimate the WBC count in acute Ischemic stroke patients and to study the correlation between WBC count at admission and short-term outcome in Acute Ischemic Stroke.

**Methodology:** A Prospective Observational study was conducted in GMCH, Udaipur in April 2018 to September 2018. All Acute Ischemic stroke patients admitted within 72hrs of onset of symptom were taken into study. A preformed proforma was prepared and recoding of data done.

Results: study included 102 cases, in that 52 (51%) were in the age group of 61 to 80 years range, in that 34 (33.3%) female and 68 (66.7%) were male. The disability assessment was done by using modified Rankin's scale with respect to total leucocytes count, in that 23 (22.54%) cases had MRS of 5 with the mean total leucocytes count of 12286.83± 3022.38 cells/micro liter of blood and with MRS of 6, only 10 (9.8%) Cases were found in relation to Total leucocytes count of 15652.10±3764.29 cells/micro liters of blood.

**Conclusion:** There is a positive association between elevated Total leucocytes count and acute ischemic stroke events. Inflammation is an independent risk factor for acute ischemic stroke. So this must be targeted, while managing acute ischemic stroke cases to reduce the disability and mortality.



# THE VALUE OF DOPPLER ASSESSMENT OF THE UTEROPLACENTAL CIRCULATION IN PREDICTING PREECLAMPSIA AND INTRAUTERINE GROWTH RESTRICTIONS

#### Dr. Keerti Choudhary

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**Objectives:** 1.) To assess the Doppler data finding in predicting adverse pregnancy outcome like PIH, Pre-eclampsia and IUGR. 2.) To correlate Doppler data with abnormal foetal and maternal outcome. 3.) To deliver the foetuses already afflicted with growth restriction, before they have suffered from the effect of hypoxia.

Methodology: Total of 100 women with high risk pregnancy attending antenatal clinic were subjected to uterine and umbilical artery Doppler study. Women with high risk pregnancy between 24-28 week of gestation were studied in this prospective study over a period of one year with colour Doppler. In both uterine artery and umbilical artery S/D ratio and RI (resistance index )were studied. S/D ratio and RI value of >95th percentile from standard value were classified as abnormal. In uterine artery presence and absence of early diastolic notch was noted. In umbilical artery absent and reversed diastolic flows were studied. Outcome of pregnancy we're evaluated.

Results: Study of total of 100 pt were studied. 1. When uterine artery was abnormal (14) pt-4 patient had Pre-eclampsia and 2 patient had PIH and 5patients had IUGR. 2. When umbilical artery was abnormal (10patients) 2patients had Pre-eclampsia 3had PIH and 3pt had IUGR. 3. 4 patients had bilateral notch-among them 3develop preeclampsia and 3pt develop IUGR. 4. When both uterine and umbilical artery Doppler were abnormal (2patient) both pt had Pre eclampsia and IUGR.

**Conclusion:** Doppler study may be useful for the prediction of preeclampsia and IUGR to reduce the maternal and perinatal morbidity and mortality.



# AN INSIGHT TO FIND SALIVARY BIOMARKER PROTEINS DURING MENSTRUAL CYCLE

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Saliva is a much superior biological material for investigation over the other body fluids. Several salivary proteins are present in minute quantities; however, they can represent the physiological and/or pathological status of individual. Ovulation is such a critical physiological process that its non-invasive prediction has several advantages. It is postulated that saliva has one or more of biomolecules in it that effectively serves as a non-invasive predictor /detector of ovulation. In the present study, the protein expression pattern in saliva during different phases of the menstrual cycle was analyzed using HR-LC-MS/MS (High resolution liquid chromatography mass spectrometry). As many as 530 proteins showed up in the saliva during ovulation phase whereas there were only 251 proteins during the post-ovulation phase. The functional annotation of salivary proteins identified belonged to the class of "extracellular proteins" with regulatory functions. The functionally important proteins included Cystatin-S, Disintegrin and metalloproteinase domain-containing protein 7 (ADAM7) and many others. Among these proteins, Cystatin-S was found to be a promising candidate as a biomarker of ovulation which adds further support to an earlier finding from our group. The data have been deposited in the ProteomeXchange Consortium via PRIDE partner repository with the dataset identifier PXD004511.



# ASSESSMENT OF EFFICACY OF AMLODIPINE WITH CILNIDIPINE IN HYPERTENSIVE PATIENTS: A COMPARATIVE STUDY

#### Dr Rootik Patel

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Introduction: The major problem encountered in treatment of patients of hypertension and diabetes with hypertension is controlling their Systolic blood pressure (SBP) and Diastolic blood pressure (DBP). One of the calcium channel blockers(CCBs) with outstanding pharmacokinetic and pharmacodynamics profile is amlodipine. Cilnidipine is the newer generation of CCB that also inhibits sympathomimetic activity. Hence; we undertook the present study to evaluate the antihypertensive efficacy of amlodipine and cilnidipine in treating patients of hypertension.

**Methodology**: The present study included assessment of 50 hypertensive patients that were undergoing treatment for the same. Auscultatory method with standard mercury sphygmomanometer was used for the measurement of the blood pressure. All the 50 patients were divided into two study groups with 25 patients in each group. The first group comprised of patients who were prescribed amlodipine 5–10 mg/day while the other group included patients who were given cilnidipine 10–20 mg/day orally as a treatment protocol for hypertension. The mean values of Systolic blood pressure (SBP) and Diastolic blood pressure (DBP) during check up were recorded and assessed.

Results: A total of 50 patients were included in the present study. The mean SBP in the Amlodipine group patients and in the cilnidipine group patients was 139.1 and 144.2 mm of mercury respectively. The mean DBP in the Amlodipine group patients and in the cilnidipine group patients was 80.2 and 85.3 mm of mercury respectively. Non-significant results were obtained while comparing the mean SBP and DBP among patients of the twostudy groups. 15 patients in amlodipine group and 2 patients in the cilnidipine group showed the presence of edema.

**Conclusion:** In hypertensive patients, equal efficacy is exhibited by both amlodipine and cilnidipine in reduction of blood pressure.



# TO STUDY THE CORRELATION OF PLATELET COUNT AND PLATELET INDICES WITH NEONATAL SEPSIS IN A TERTIARY CARE HOSPITAL, JAIPUR

Dr Sarita Netra, Dr Rameshwari Bithu, Dr Rakesh K Maheshwari Microbiology, SMS Medical College, Jaipur

**Background:** Neonatal sepsis is major cause of neonatal morbidity and mortality. Hematological changes induced by culture proven and probable neonatal sepsis have been used to make an early diagnosis. Platelet count and platelet indices can be helpful in the future diagnosis of neonatal sepsis.

**Objective:** To evaluate variations in platelet count and platelet indices- mean platelet volume (MPV) and platelet distribution width (PDW) in neonatal sepsis.

**Methodology:** The study included 100 cases of neonatal sepsis. Blood culture, Platelet count, MPV and PDW were evaluated.

Results: Culture proven sepsis was present in 26 neonates, out of these 5 cases (19.23%) had fungal sepsis, 8 (30.77%) gram positive and 13 (50%) had gram negative sepsis. the most common pathogen was Staphylococcus aureus 5/26(19.23%) in gram positive organism and Klebsiella pneumoniae 7/26 (26.92%) in gram negative. Thrombocytopenia was present in 42% and thrombocytosis in 6% cases. Mild thrombocytopenia was noted in 22 (52.38%), moderate thrombocytopenia in 15 (35.71%) and severe thrombocytopenia in 5 (11.90%) babies. There was statistically significant correlation of MPV with age at onset of sepsis (high MPV in late onset sepsis), platelet count (high MPV in thrombocytopenia neonates). Culture positive neonates had high prevalence of thrombocytopenia, high MPV and high PDW.

**Conclusion:** Prevalence of thrombocytopenia was significantly high in culture proven sepsis (64.7%). Thrombocytopenia, high MPV and high PDW are more associated with neonatal sepsis. Hence platelet count and platelet indices can be used as a sensitive marker for early diagnosis f neonatal sepsis.



# PREVALENCE OF LOW DIETARY CALCIUM INTAKE IN PATIENTS WITH EPILEPSY- A STUDY FROM TERTIARY-CARE HOSPITAL LOCATED IN SOUTHWEST RAJASTHAN INDIA

#### Dr. Suresh Choudhary, Dr YN Verma

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**Background:** The effects of antiepileptic drugs (AED) on bone health are well documented. Inadequate dietary intake of calcium and vitamin D plays a vital role and further compromises the bone health.

**Objective:** To assess the dietary pattern with special reference to calcium and related minerals in people with epilepsy (PWE) on AED.

Methodology: The dietary assessment in PWE was documented by dietary recall method. Patients were categorized according to age: group I: <14 years; group II: between 15-20 years; group III: between 21-45 years; group IV: >46 years. From the raw weights, total energy, dietary calcium, dietary phosphorous intake and phytate calcium ratio was calculated using a food composition table by Indian Council of Medical Research (ICMR) and analyzed statistically.

**Results:** A total of 62 patients with mean age of 29 + 15 years were studied. There were 21 women and 41 were men. The mean duration of AED treatment was 4 + 3 yrs, 64% on monotherapy 64% and 36% on polytherapy. The mean dietary intake of the total chohort was 2,007 + 211 Kcal/day, carbohydrate 335 + 33 gm/day; protein 31 + 7 gm/day; fat 18+2 gm/day; calcium 294 + 40 mg/day; phosphorus 557 + 102; phytates 179 + 30 mg/day; and phytate/calcium ratio 0.56+0.2. Milk and milk products were consumed by 42% of the total cohort. The daily dietary calcium (301 + 40 mg/day) intake of men was significantly higher than women (287 + 39 mg/day) (P < 0.001). This was more evident in group II (P < 0.01) and group III (P < 0.03). There was a positive correlation between dietary calcium and dietary phytates (P < 0.001), dietary proteins (P < 0.001), dietary fat (P < 0.001), and total energy (P < 0.001).

**Conclusion:** The dietary consumption of calcium of all the patients was far below the recommended daily dietary allowance (RDA) by Indian Council of Medical Research (ICMR). Low dietary calcium could have a confounding effect on PWE on AED in all age groups. There is a need to formulate consensus guidelines to supplement dietary calcium to PWE.



#### PSYCHIATRIC MORBIDITY, COGNITIVE DYSFUNCTION AND QUALITY OF LIFE IN DRUG-NAIVE PATIENTS WITH PARKINSON'S DISEASE: A CROSS SECTIONAL STUDY

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**Introduction:** Parkinson's disease is defined by its characteristic motor hallmark of tremor, bradykinesia, rigidity & gait impairment. Non-motor signs & symptoms are increasingly recognised as a part of PD, even in the early stage of disease. There is paucity of Indian research in this area among drug naïve parkinson's disease patients.

**Objective:** To compare the prevalence of psychiatric morbidities (depression & anxiety), cognitive dysfunctions & quality of life in drug naïve patients with parkinson's disease with healthy controls & its association with severity of illness.

Methodology: A cross sectional study was conducted in 50 drug naïve PD patients & 50 healthy controls. Both groups were assessed on the 12 item General Health Questionnaire, Hamilton Rating Scale for Depression, Hamilton Rating Scale for Anxiety, Kolkata Cognitive Screening Battery & Parkinson's Disease Questionnaire 8. Severity of PD was assessed on Hoehn & Yahr Scale.

Results: Depression was found in 22% (p=0.007) & Anxiety was found in 10% (p=0.414) Drug Naïve Parkinson's Disease Patients which were statistically higher compare to healthy controls. All the cognitive parameters namely Verbal fluency (p=0.000), MMSE(p=0.000), Calculation(p=0.000), Memory immediate recall(p=0.000), Visuo-constructional ability(p=0.000), Memory delayed recall(p=0.000), Memory delayed recognition (p=0.000)were significantly impaired in Drug Naïve Parkinson's Disease Patients except for Object naming (p=0.523). Severity of PD was not associated with Psychiatric morbidities, Cognitive dysfunctions except Verbal fluency & Quality of Life.

**Conclusion:** Non-motor symptoms in PD are more prevalent even at 1<sup>st</sup> consultation to the physician &poor QOL is a major factor leading to initial consultation. Early diagnosis & management of non-motorsymptomscan alter & improve QOL in PD patients.



# A STUDY ON SERUM URIC ACID LEVELS AS PROGNOSTIC INDICATOR IN ACUTE MYOCARDIAL INFARCTION

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**Background:** Acute myocardial infarction is one of the leading causes of mortality and morbidity globally. Certain markers like Uric acid indicate unfavorable prognosis in IHD, higher blood pressure and an overall adverse CVD risk profile.

**Objective:** To evaluate correlation between elevated serum uric acid levels and prognosis of patients with AMI.

**Method:** Base on diagnostic criteria, 100 confirm patients of AMI who admitted in JMC, Jhalawar were enrolled in study. A written consent was taken from all participants. Information was collected and workup of the cases was done as per standard proforma. Relevant clinical workup including detailed history, general and physical examination, serial ECGs, relevant laboratory investigations and appropriate treatment were carried out in these patients. Patient's serum uric acid level was measured on day 0, 3 and 7 of MI.

Result: Majority (37%) of the patients were in the age group of 51-60 years. AMI was more common in males (70%) and patients who had BMI≥30 (45%). On day 0, mean uric acid level in patients belong to Killip class I, II, III and IV was 4.4, 7.01,8.29and 9.87 mg/dlrespectively. Mean serum uric acid levels on day 7 in patients with Killip class I is 4.67 and those with Killip class II is 6.62 mg/dl. This difference is statistically significant with p value<0.001. Total six patients expired during hospital stay and all 6 belonged to higher Killip class with serum uric acid levels in the highest quartile.

Conclusion: Hyperuricemia is an indicator of poor prognosis in acute MI.



# DIAGNOSTIC UTILITY OF PLASMA THROMBOPLASTIN CELL BLOCK TECHNIQUE IN CYTOLOGICAL EVALUATION OF LIVER SPACE OCCUPYING LESIONS (SOLs)

#### Dr Utkarsh Sharma<sup>1</sup>, Dr Ajay Yadav<sup>2</sup>

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**Background:** Cell block technique acts as a useful adjunct to conventional smear cytology for diagnosing and subtyping malignant lesions. Plasma thromboplastin cell block technique is simple, less time consuming and provides improved cytomorphology.

**Objective**: To study the utility of Thromboplastin-plasma cell block technique and its diagnostic significance in conjunction with conventional cytology smears in evaluation of liver space occupying lesions.

**Methodology:** Thirty samples, clinically and radiologically suspicious for malignancy were included in the study. In addition to preparation of conventional smears, remaining material was used for preparing cell block. Cell blocks were prepared using Plasma thromboplastin cell block technique.

Results: Cellularity and diagnostic yield for malignancy was increased by cell block preparation. Conclusion: Plasma Thromboplastin cell block method provides high cellularity, better architectural patterns and good preservation of cellular and nuclear details, thereby, increasing diagnostic yield in the cytological evaluation of liver SOLs when compared to conventional smears alone. Also, it is easier to apply immunomarkers and perform molecular studies on the cell blocks that can be stored safely for future testing. Thus, cell blocks can act as a useful adjunct to the conventional cytosmears for evaluation of liver SOLs.



#### HYPERTENSION AND VITAMIN- D CORRELATION

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Introduction: Hypertension is a chronic disorder with serious risk factors for clinically important events including myocardial infarction, heart failure, stroke and death.. Vitamin D is a micronutrient with important implications for human health and has recognized functions in calcium and bone metabolism. Low 25-hydroxyvitamin D levels are related to higher prevalence of blood pressure and evidences from meta-analysis of cohort studies showed that vitamin D deficiency, predicts enhanced risk of hypertension. Several mechanisms proposed that vitamin D decreases blood pressure. The aim of study is to determine vitamin d correlation in hypertensive patient.

Methodology: The study are conducted on 30 hypertensives and 30 non hypertensives patients between age 30yrs and 75 yrs at GMCH Udaipur. Patients with other comorbid conditions like Diabetes Mellitus, hepatic or renal disease, hypercalcemia, previously taken any form of vitamin supplementation, bisphosphonates or hormone replacement therapy and history of smoking, alc oholism or tobacco use were excluded from the study. Complete history taking, general examination & blood pressure measurement was done. Investigations such as ECG, RBS, serum vitamin d2 levels, blood urea, serum creatinine, usg w/a, serum calcium levels was done.

**Results:** The hypertensive patients had lower levels of vitamin d with vitamin d status of deficiency in 52% of the cases and insufficiency in 38% of the cases and normal levels in 10% of the cases. Non hypertensive controls showed vitamin d status of normal in 80% of controls and insufficiency in 16% of the controls and deficiency in 4% control.

**Conclusion:** Vitamin d deficiency appears to be independent risk factor that is associated with hypertension.







#### OP. 1

# A STUDY ON BURDEN OF VIT-B 12 DEFICIENCY IN ELDERLY POPULATION IN UDAIPUR

#### Dr. Akhlaq H., Dr AK Verma

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**Introduction:** Vitamin b-12 deficiency is common in elderly (age more than 60 years) population. Its deficiency leads to several neurological manifestations. The diagnosis is frequently made on basis of a low serum Vit B12 or megaloblastic bone marrow or both.

**Objectives:** To estimate the prevalence of Vit B12 deficiency and its common risk factors in elderly patients attending the tertiary care hospital in Udaipur.

**Methodology:** The study was done on 50 elderly patients and 50 controls visiting mb hospital Udaipur. Estimation of serum Vit B12 levels was done by roche elecsys modular cobas e 411 using electrochemiluminescence assay.

**Result and conclusion:** Finding showed that mean value of serum Vit B12 in elderly pts  $(168.5\pm0.5)$ pg/ml was significantly lower than control mean value  $(213\pm0.8)$  pg/ml. Deficiency of Vit B 12 should be prevented for overall benefit of health.



# A STUDY OF IDENTIFYING BACTERIAL ISOLATES IN URINE SAMPLE AND THEIR ANTIBIOTIC SENSITIVITY PATTERN AT TERTIARY CARE HOSPITAL IN SOUTHERN RAJASTHAN

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**Objective:** The aim of the study was to isolate different pathogens in urine sample and to study their antibiotic sensitivity pattern at tertiary care hospital in Udaipur, Rajasthan From March 2018 to September 2018

**Methodology:** A total of 500 urine samples were included in this study from patients attended at MBGH RNT medical college Udaipur with proper sterile precautions. Samples were cultured on HiCrome UTI agar and bacterial isolates obtained were identified using biochemical reactions. Antimicrobial sensitivity testing was performed by the Kirby-Bauer disc diffusion method.

**Results:** A total of 200 uropathogens were isolated from 500 urine samples. Escherichia Coli was the most commonly isolated uropathogen accounting for 47.50% (95/200) of the total isolates followed by Enterococcus accounting for 28% (56/200) of the total isolates. Among Gram positive cocci Linezolid was found to be most sensitive , among Gram negative bacilli Meropenem was found to most sensitive.

**Conclusion:** Such studies are required for regular monitoring and to obtain reliable information about sensitivity pattern of uropathogens for empirical therapy of patients with UTI. Meropenem should be reserved for empirical treatment in patients with UTI in resistant cases.



# HISTOPATHOLOGICAL SPECTRUM OF GASTROINTESTINAL TRACT LESIONS A TERTIARY HEALTH CARE CENTRE BASED STUDY IN SOUTH EAST RAJASTHAN

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**Introduction:** The gastrointestinal tract lesions constitute a wide array of pathological lesions whether neoplastic or non-neoplastic.

**Objective**: To study the age, gender and site wise occurrence and incidence of all the different lesions involving the gastrointestinal tract.

**Methodology:** This was a retrospective study conducted in the Department of Pathology at Geetanjali Medical College & Hospital, Udaipur, Rajasthan,India from January 2017 to September 2018. Total 169 GIT specimens were included in the study. All the specimens were fixed in 10% buffered formalin and routinely processed and paraffin embedded sections were taken and stained with Hematoxylin and Eosin. The slides were examined under light microscope.

Results: Out of total 169 GIT specimens, 69 (40.8%) were females and 100 (59.2%) were males. The most common biopsy received was that of small intestine 72 (42.6%) followed by colon 63 (37.3%),esophagus 25 (14.8%) and stomach 9 (5.3%). In case of small intestine, there were 71 cases (42%) of non-neoplastic lesions and 1 case (0.6%) of Gastrointestinal stromal tumor. Among colon biopsies, there were 42 cases (24.9%) of non-neoplastic lesions, 10 cases (5.9%) of ulcerative colitis, 9 cases (5.3%) of Adenocarcinoma and 2 cases (1.2%) of Tubular adenoma. Among the esophageal biopsies, there were 18 cases (10.7%) of squamous cell carcinoma,4 cases of adenocarcinoma and 3 cases (1.8%) of esophagitis. Among gastric biopsies, there were 6 cases (3.6%) of non-neoplastic lesions and 3 cases (1.8%) of Adenocarcinoma.

**Conclusion:** In this study, majority of the cases were non-neoplastic. In case of neoplastic lesions, the most common lesion was squamous cell carcinoma in the esophagus whereas adenocarcinoma was more common among the gastric and colon biopsies.



#### VOLUNTARY BLOOD DONATION FOUNDATION OF SAFE AND SUFFICIENT BLOOD SUPPLY

#### Dr Diksha Rewal

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**Aim**-To analyse the seroreactivity for TTI between voluntary blood donors and replacement donors

Methodology A prospective study was conducted from June 2018 to September 2018 at Rnt medical college ,Udaipur on 7503 blood donors. All blood donors were screened for hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV) by using the appropriate enzyme-linked immunosorbent assay . Malarial antigen testing was carried by rapid diagnostic device, which was based on immunochromatographic technique. The rapid plasma reagin (RPR) test was used for estimation of syphilis infection.

**Result** - A total of 7503 blood donors were screened during the study period, of which 7356 (98.04%) were males and 147 ( 1.95%) were females. Among all donors 4089(54.49%) were voluntary and 3414 (45.50%) were replacement donors . The overall Seroprevalence TTI were 0.71% among these HIV, HBV and HCV were 0.06%,0.62%, 0.002% respectively; for malaria and syphilis, the Seroprevalence was estimated to be~0% and~0% respectively during this time duration . In the present study, decreasing trend for all the markers was observed during study period

**Conclusion** -The over all study suggest that risk of TTI's are less in voluntary donors as compared to replacement donors but the risk of TTI remains despite of serological testing because of donors' window period. Steps should be under taken to prevent these transmissions by careful selection of potential blood donors through a health history questionnaire and create opportunities for self-deferral.



#### TO STUDY H1N1 FLU (SWINE FLU) AND VARIOUS ASSOCIATING FACTORS AMONG PATIENTS ATTENDING A TERTIARY CARE HOSPITAL AT AJMER (RAJASTHAN)

#### Hemant Singh<sup>1</sup>, Shailendra Garg<sup>2</sup>, Geeta Parihar<sup>3</sup>

1. Resident, 2. Assistant Professor 3. Professor and HOD, Department of Microbiology JLN Medical College, Ajmer (Rajasthan)

**Introduction:** H1N1 Influenza (Swine flu) is a major cause of morbidity and mortality. It is a acute respiratory disease that is caused by swine influenza A strain and the disease is very contagious. People suffering from diabetes, chronic heart disease and pregnant women are at higher risk of developing complications of swine flu.

**Objectives:** To know the H1N1 flu status among the suspected patients and to find out the association of various factors among swine flu positive patients.

**Methodology:** Nasopharyngeal swabs of 704 suspected patients were processed for H1N1 status from October 2017 to September 2018 and analysed prospectively. Samples processed by standard RT-PCR (Real Time-Polymerase chain reaction) protocol. Results were obtained by analysis of various amplification curves.

**Results:** Out of 704 samples, 122 (17.32%) samples were found to be swine flu positive. Female positivity rate was 62.30% (76) of total positive samples whereas male contribution was 37.70% (46).Middle age group (19-60 years) was found to be most severly affected.

**Conclusion:** In our study, female predilection of H1N1flu virus was observed. Virus was found to be more active in winter season. Early diagnosis of swine flu and proper treatment with Oseltamivir and life supporting care at ICU could spare the patients from mortality and the associated complications.



## HISTOPATHOLOGICAL SPECTRUM AND IHC PROFILE OF METAPLASTIC BREAST CARCINOMA

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**Introduction:** Metaplastic breast carcinoma (MBC) of breast is defined as a mammary carcinoma with mixed epithelial and sarcomatoid component. The histologic classification is based on the morphologic findings of tumor cell types. The overall prognosis and treatment is unknown, however MBC patients have poor prognosis when compared with patients with IDC. It is difficult to differentiate metaplastic change on clinical, mammographic and cytological examination.

**Objective**: To study the morphology of metaplastic breast carcinoma and to correlate with immunohistochemistry.

**Methodology**: 14 cases diagnoesd as MBC in department of pathology in past 4 years (2014-2018) were retrieved and retrospectively analysed.

**Results**: In our series of 14 MBC cases, 5 had spindle cell carcinoma, 3 had squamous cell carcinoma, 2 had poorly differentiated morphology and others each had chondroid, osteoid, melanin and carcinosarcomatoid differentiation. On Immunohistochemistry all the cases were harmone negative.

**Conclusion**: Metaplastic carcinoma of the breast (MBC) is an aggressive and rare type of breast cancer. It can mimic IDC as well as benign lesions on mammography. Pathologic tissue diagnosis is essential to distinguish MBC from other breast cancers in order to institute proper and prompt treatment.



## A STUDY ON ATTITUDE, KNOWLEDGE AND PRACTICE OF BLOOD DONATION AMONG PUBLIC IN UDAIPUR REGION

#### Dr. Manu Jethalya

Resident, Pathology, GMCH, Udaipur

Background: First blood bank in india was established at Calcutta in 1942 to meet the blood needs of the war .in 1998 supreme court banned buying blood from commercial sellers in india. A range of sociodemographic, organized, physiological and psychological factors may influence people willingness to donate blood. education had positive influence on attitude towards blood donation as well as blood donors satisfaction to the time and location of donation. most common misconception about blood donation were the risk of infection, selling donated blood to patients and that blood donation believed to cause physical weakness. Objective: This study aims to assess the knowledge, attitude and practice of blood donation among general public in Udaipur region and to identify barriers influencing blood donation. Methodology: This study is conducted on 550 people in general public of Udaipur region from july 18 to september 18 using a questionnaire. the data was tabulated in a masterchart and analyzed.

**Results**- Inadequate knowledge about blood donation was found in only in 29% of participants. Friends, encouraging media and myths were influential factors affecting their knowledge and attitudes towards blood donation.

**Conclusion**- Educational programmes need to be organized in order to improve knowledge and attitude of general population, create awareness and remove myths and fallacies about blood donation.



#### HISTOPATHOLOGICAL ANALYSIS OF MENINGIOMAS -A RETROSPECTIVE STUDY

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**Background:** Meningiomas are tumors that arise from the meningothelial cells. There are many histological variants classified into three grades depending on clinical behavior. Classification is important for determining the modality of treatment.

**Objective:** To study the incidence, location, sex and age predilection, histological variants and grading of meningiomas based on WHO 2016 classification.

**Methodology:** A Retrospective study from January 2017 to June 2018 of 28 meningioma cases received in Pathology department, GMCH, Udaipur. Grading of meningiomas was done as per the WHO 2016 classification of Meningiomas. Age, Sex incidence, Location of meningiomas were studied.

**Results:** Among the 28 cases, female to male ratio was 1.5:1. Mean age was 47.7 years. Meningothelial Meningioma (10 cases, 35%) was the most common meningioma. 25 Meningiomas were WHO grade I, while 3 cases were WHO grade II.



#### SURVEILLANCE OF ICUs OF A TERTIARY CARE HOSPITAL, JAIPUR

#### Dr Parul gupta, Dr Rajni sharma

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**Background:** Hospital-associated infections are the major cause of patient morbidity and mortality. Environmental monitoring by the microbiological testing of surfaces and equipments is useful to detect changing trends of types and counts of microbial flora.

**Objective:** To identify bacterial colonization of surface and equipments from ICUs of a teaching hospital & to determine antimicrobial susceptibility pattern of potential pathogens.

**Methododology:** Samples from different sites and equipments such as walls, floor, ICU equipments, dressing trolley etc were taken by sterile swabs and processed as per standard laboratory protocols. Various organisms isolated from the sample and identified on the basis of standard laboratory protocol. Antibiotic susceptibility was done by Kirby bauer disc diffusion method.

Results: 38 (42.2%) organisms were isolated from total 90 samples taken from various sites. Organisms isolated were divided into Normal flora 2) Contaminant 3) Pathogens .Out of 38 organisms 21 normal commensal , 14 pathogenic organism i.e. COPS(2), Klebsiella spp.(5), Citrobacter(2), and Enterobacter aerogenes(5) and some contaminants were grown. Most of gram negative organisms were resistant to more than 2 or 3 groups of antibiotics and were only sensitive to polymyxin,& gram positive organisms showed good sensitivity to vancomycin and linezolid.

**Conclusion**: Isolated pathogens were found multidrug resistant. Harboring of potential pathogens in ICUs of hospital can pose a great risk to patients. Surveillance of ICUs with infection control measures is helpful in controlling nosocomial infections



#### DONOR DIFFERAL

#### Dr Rajesh Kumar

Resident, Transfusion Medicine, RNT Medical College, Udaipur

Introduction-Blood transfusion is an indespensible component of heath care. It saves millions of life each year in both routine and emergency situation. Patient who require transfusion have to right to expect that sufficient blood will be available to meet their need and to receive the safest blood possible. For this we have to screen the each donor for the safety of recipient and donor. In the process of screening we have to decide whether donor is fit for donating blood or deffered.

**Aim-**To evaluate and analyze the blood donor differential pattern and causes of differal to review its influence on blood safety.

**Setting and design-**RNT hospital blood bank,retrospective analysis for 4 month (june 2018-sept 2018). The data available donor differal record.

#### Results:

	MALES	FEMALES
TOTAL DONORS	7343	198
DEFFERED	700	20

Total differal rate-9.54%. Most common cause of differal in both male and female is-Hb 12.5gm%(34%)

Other causes- Weight less than 45 kg(30%), History of taking medicine(12%), History of last blood donation(8%), Tatoo making less than 6 month duration(6%), Diabetic on insulin(5%) Asthma on steroid(3%), H/O MI, CAD(2%)

**Conclusion-**Temporarily deffered donor with corrective reason can be identified, properly informed and guide to improve their quality of blood for future donation.



#### SPORADIC OF CORYNEBACTERIUM DIPHTHERIAE IN SOUTH EAST RAJASTHAN

Dr. Riya Gupta<sup>1</sup>, Dr. Naveen Saxena<sup>2</sup>

1. Resident; 2. Professor, Microbiology, Government Medical College, Kota

**Background**: Diphtheria is an acute toxin mediated disease caused by *Corynebacterium diphtheriae*. Clinical Diphtheria is on increase worldwide, mainly in developing countries and presents as both endemic and epidemic cases. Recently sporadic cases of Diphtheria have been reported from some villages of Sawai Madhopur district of South East Rajasthan.

**Objective**: To assess the incidence of clinical Diphtheria, its mode of presentation and the relationship between clinical disease and immunisation status.

**Methodology:** The study was done from 15 September 2018 to 13 October 2018. The total number of cases was 72 during this period. It includes patients of all age group with fever, difficulty in breathing, pharyngitis and greyish white membrane in throat in most of the patients. Data collected for each patient includes age, clinical presentation, and immunisationstatus. The samples were collected from posterior pharyngeal wall which were followed by direct Microscopy and culture.

**Results**: Amongst 72 samples, 27 (37.5%) cases were positive for *Corynebacterium diphtherae*, in which 13(48.15%) patients were  $\leq$ 10 years of age group and rest of the patients were > 10 years of age. In these patients immunisation status was also incomplete.

**Conclusion**: This study reaffirms the vital role of immunisation and the importance of efforts to ensure a high uptake of the scheduled immunisation especially in rural and illiterate population of Rajasthan.



## STUDY OF GASTRIC BIOPSIES IN PATIENTS OF GASTRITIS FOR DIAGNOSIS OF H. PYLORI INFECTION BY H&E AND GEIMSA STAINS

Dr. Rubina Hitawala, Dr.Sudhamani S, Dr. Prakash Roplekar

Pathology, D.Y.Patil School of Medicine, Navi Mumbai

**Background:** Helicobacter pylori infection is considered to be the most prevalent cause of chronic gastritis. It causes acid peptic disease, chronic gastric ulcers, and cancers like mucosa — associated lymphoid tissue (MALT) lymphomas. It is important to demonstrate H.Pylori as it is easily amenable to medical treatment and to prevent further complications.

**Objective:** To detect H. pylori on Haematoxylin & Eosin (H & E) & Giemsa stains on gastric biopsies done in patients of gastritis and to study the histopathological features associated with H. pylori infection. To estimate the occurrence and frequency of H. pylori infection in various age and sex groups.

**Methodology:** Prospective cross- sectional study of patients who underwent gastric biopsies for diagnostic purpose from May 2017 to September 2018 (18 months) was conducted. Clinical and endoscopic details were recorded as per the proforma. Gross and microscopic findings were noted on H&E and Giemsastains. Correlation of findings was done and statistically analysed.

**Results:** Out of total 58 cases of gastric endoscopic biopsies studied, 10 (17.2%) were positive for H.Pylori infection. Out of these H. pylori positive cases, 8 cases were detected on H & E (80%) and all 10 (100%) showed positivity on Giemsa.

**Conclusion:** It is important to detect H. Pylori by both H&E and Giemsa to increase sensitivity and accuracy.



#### A COMPARATIVE STUDY OF WIDAL TEST WITH CLOT CULTURE IN DIAGNOSIS OF ENTERIC FEVER IN FEBRILE PATIENTS AT TERTIARY CARE HOSPITAL IN SOUTHERN RAJASTHAN

Dr. Shubhangi Sharma, Dr. Anshu Sharma Dr. Gajanand Mittal Microbiology, RNT Medical College, Udaipur

**Objective:** To correlate the result of Widal test and clot culture in the diagnosis of enteric fever.

**Methodology:** Blood samples were collected from 306 febrile patients with symptoms clinically similar to enteric fever and visiting MBGH, R.N.T. Medical college, Udaipur from march to September2018 clot was seperated from blood and used to isolate S.typhi and S.paratyphi. slide and tube agglutination test were used to determine antibody titer. An antibody titer of >1:80 for anti TO and >1:160 for anti TH were taken as a cut of value to indicate recent infection of enteric fever. The identification of isolates by phenotypic method (biochemicalreactions) and confirmation was done using antisera.

**Results:** One hundred sixty three(53.2%) participants were females and one hundred fourty three(46.7%) were males. 21(6.8%) cases of S.typhi and 6(1.96%) cases of S.paratyphi were identified with the total prevalence of typhoid fever 8.7%.

Conclusion: Widal test; unless done in paired sera can be used for screening of enteric fever. samples yielding high titer of TO(1:80) and TH(1:160) are reliable, as maximum no. of positive clot culture(8.7%) belong to this titer one exceptional sample had TO 1:80 and TH negative, this was possibly due to sample sent in 1st week.



#### SPECTRUM OF INHERITED BLEEDING DISORDER IN A TERTIARY CARE CENTRE IN WESTERN PART OF INDIA

Dr Vinod Kumar Gurjar, Dr Nidhi Sharma, Dr Sandhya Gulati Pathology, SMS Medical College, Jaipur

**Background:** The most common inherited disorders of coagulation are Haemophilia A, Haemophilia B and von-Willebrand disease. Haemophilia A and B are sex-linked, whereas von Willebrand's disease is inherited in an autosomal fashion. Definitive diagnosis is made using proper history and coagulation factor assays.

**Objective:** To analyze the spectrum of inherited bleeding disorder among the patients presenting in our lab and to propose an algorithm approach to the diagnosis of bleeding disorder.

**Methodology:** Samples were taken from those patients who were referred to our lab for screening a bleeding disorder. First line screening was done using PT and APTT. Factor VIII and Factor IX assays were done for cases with isolated increase in APTT. Further, von willebrand assay and mixing studies were performed for cases with decreased factor VIII levels. Data was analyzed using Microsoft excel 2010.

**Results:** Total 607 samples were taken for screening. Of these 607, 311 showed factor VIII deficiency, 14/311 cases showed decreased VWF level and hence were labelled as VWD. 83 case out of 607 cases showed a deficiency of Factor IX.

**Conclusion:** Bleeding disorders are not uncommon in spite of their apparent rarity, hemophilia A remains the most common bleeding disorder in our population. A step wise algorithmic approach is needed to diagnose these disorders in resource limited centres.



#### SERUM URIC ACID IN ACUTE MYOCARDIAL INFARCTION

#### Dr Abhay Kumar, Dr Damodar Parikh

Geetanjali Medical College And Hospital, Udaipur

**Introduction:** In patients with coronary artery disease (CAD), elevated serum uric acid (SUA) levels may predict worse cardiovascular outcome. We study the correlation between serum uric acid level in patients of myocardial infarction.

**Methodology:** 50 patients of myocardial infarction and 25control patients in Cardiac ward and CCU of Geetanjali medical college and hospital were studied. Detail history and clinical examination was done. Patient were assessed according to Killip's classification. Serum uric acid levels were measured.

**Results:** Out of these patients studied, there was statistically significant higher levels of serum uric acid levels in patients of MI (5.96 +/- 2.6 mg/dL)as compared to controls (4.15 +/- 0.45mg/dL). Serum uric acid levels were higher in patients who were in higher Killip class. Out of 50 patients of myocardial infarction, 5 patient has previous history of CAD who had higher level of uric acid. 3 patients died who had serum uric acid level more than 7 mg/dL.

**Conclusion:** Serum uric acid level was higher in patients of acute myocardial infarction correlated with Killip classification. Patient with history of myocardial infarction had higher level of Serum uric acid. Hence, the serum level can be a predictor for the possibility ofoccurrence of sever heart failure in patients with acute myocardial infarction.



### STUDY OF THYROID DYSFUNCTION IN PATIENTS OF CHRONIC KIDNEY DISEASE

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**Background:** Chronic Kidney Disease is a spectrum of different pathological processes associated with progressive decline in glomerular filtration rate. Progression of CKD is associated with thyroid dysfunction, especially hypothyroidism.

**Objective:** The aim of the study is to determine the status of thyroid function and its relation to the severity in patients with chronic kidney disease.

Methodology: A total 30 patients of chronic kidney disease at GMCH, Udaipur were studied. Adetailed clinical history and clinical examination was done, GFR was estimated by Cockcroft-Gault equation and Serum triiodothyronine (T3), thyroxin (T4), thyroid stimulating hormone (TSH), creatinine, urea, electrolytes and total proteins and albumin were measured.

Results: Out of 30 patients, maximum incidence of CKD was seen in age group of 41-50 years. 18 were hypertensive, 10 were diabetic and 6 were both hypertensive and diabetic. Thyroid dysfunction was found in 63.3% (19/30) of the patients. Among 63.3% of patients excluding primary hypothyroidism, 56.7% (17/30) of patients revealed low T3 level with normal T4 level and remaining 6.6% (2/30) revealed both low T3 and T4 level. Low serum T3 had a linear relationship to the severity of the chronic kidney disease.

**Conclusion:** Derangement in kidney function is associated with abnormalities in the thyroid hormone physiology. Severity of CKD is accompanied by low T3, low T4 and occasionally high TSH.



### STUDY OF LIPID PROFILE IN TYPE 2 DIABETES MELLITUS PATIENTS AND ITS CORRELATION WITH HBA1C

#### Dr Akansha Gupta, Dr YN Verma

Medicine, Geetanjali Medical College and Hospital, Udaipur

Background: Diabetes mellitus is characterized by Chronic Hyperglycaemia with disturbances in Carbohydrate, Fat and Protein metabolism resulting from defects in insulin secretion, insulin action or both. Dyslipidemia in diabetes commonly manifests as raised low-density lipoprotein cholesterol (LDL-C), decreased high-density lipoprotein cholesterol (HDL-C) levels, or elevated triglyceride (TG) levels. Many studies have proposed HbA1c to be used as a biomarker of both glycaemic control and dyslipidemia in type 2 diabetes mellitus.

**Objective:** Study aimed to observe the lipid profile in type 2 diabetes mellitus patients and to find out the correlation between glycated haemoglobin (HbA1c) and lipid profile in type 2 diabetes mellitus patients.

**Methodology:** This is a cross sectional case control study conducted at Geetanjali Medical College and Hospital from 50 patients of type 2 diabetes mellitus were taken after obtaining written and informed consent from them . HbA1c and Lipid profile were done in cases using appropriate tests.

**Results**: There was highly significant difference in mean HDL in diabetic patients (39.66  $\pm$  10.17) and controls (52.02  $\pm$  11.15) . Also highly significant difference found in mean triglyceride in diabetic patients (185 $\pm$ 76.87) and controls (125.22 $\pm$ 17.14). There was no significant correlation found between Hba1c and TC ,LDL,HDL AND TG .

**Conclusion:** The study demonstrated the typical diabetic dyslipidemia which is characterised by low HDL, high triglyceride. No significant correlation found between Hba1c and TC, LDL, HDL and TG.



#### A STUDY OF CLINICAL PROFILE OF PANCYTOPENIA IN A TERTIARY CARE CENTRE

#### Dr Akash Jain, Dr Lalit Shrimali

Medicine, Geetanjali Medical College and Hospital, Udaipur

**Introduction:** Pancytopenia is an important hematological problem in which there is decrease in all three cellular elements of peripheral blood leading to anemia, leucopenia and thrombocytopenia.

**Objective:** This study is done to evaluate the clinico-hematological profile of pancytopenia in adult patients.

**Methodology:** A total of 53 cases of pancytopenia presenting at Geetanjali medical college and hospital were studied. Detailed clinical case history and physical examination was done followed by complete haemogram with peripheral smear and subsequently urine & stool samples were analyzed for occult blood. Bone marrow aspiration was done as per the clinical indications.

Results: Out of 53 cases, 29 male & 24 female were diagnosed to have Pancytopenia. The mean age of patients was 35.15±12.6 years. In our study, the main etiological cause of pancytopenia in our case series was megaloblastic anaemia followed by septicaemia and alcoholic and nonalcoholic liver disease. Common clinical presentations of pancytopenia cases noted were pallor 60%, fever 41.5%, weakness 34%, splenomegaly 24.5%, hepatomegaly 17%, bleeding 19% and edema 15%.

Conclusion: Pancytopenia is not an uncommon hematological problem encountered in clinical practice. In our study, megaloblastic anemia was found as the most common cause of Pancytopenia followed by septicaemia and alcoholic & nonalcoholic liver diseases. Hence, clinical finding along with primary haematological investigations with bone marrow aspiration would be helpful in early identification and early intervention of patient with pancytopenia.



## RELATIONSHIP BETWEEN DIFFERENT GRADES OF MALNUTRITION AND FEEDING HABITS OF CHILDREN: A STUDY FROM MEWAR

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**Background:** Childhood under nutrition is a critical public health and development challenge in India. Nearly half of all deaths in children under-5 age group are attributable to under-nutrition. One of the key reasons for under-nutrition in early life is faulty feeding practices.

**Methodology:** 295 children under the age of 5 years residing in Udaipur were included in the study. Their feeding habits like exclusive breastfeeding, administration of colostrum, complementary feeding and bottle feeding were noted. Anthropometric measurements were done and these children were categorized as per WHO classification of malnutrition.

Results: 23.2% of SAM children received exclusive breast feeding up to 6 months in comparison to 52.1% of control group; 59.4% of SAM children received colostrums compared to 86.8% of control group. Only 44% of SAM children received complementary feeding (home-made/commercial) compared to 83.6% of control group. 49.2% of SAM children received bottle feeding compared to 22.6% children of control group.

**Conclusion:** Most of the children who were not given breast feeding up to 6 months, deprived of colostrum at birth, not started complementary feeding at appropriate time and offered commercial milk preparations were severely malnourished.



#### DYSLIPIDEMIA IN CHRONIC RENAL FAILURE AND ITS IMPLICATIONS IN ASSOCIATED CARDIOVASCULAR DISEASE

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1.Resident 2. Associate Professor 3.Professor and Unit head, Medicine, Jhalawar Medical College Jhalawar

**Background:** Cardiovascular risk increases with each decrement in renalfunction. CKD exhibit significant alterations in lipoprotein metabolism and causes dyslipidemia which has been established risk factor for CVD.

**Objective:** To assess dyslipidemia in CKD patients and it's implication in occurrence of cardiovascular disease.

Methodology: A total 30 patients of CKD who fulfill the inclusion and exclusion criteria and admitted in JMC, Jhalawar during one year were included in study. Patients of CKD were confirmed by clinical, biological and USG findings. The control group was formed by 30 healthy persons, which was age and sex matched to the study group. With written consent, all study participants were subjected to detailed history, physical examination and required laboratory investigations. All collected informationwas recorded in a pre-designed proforma and analysed by using SPSS software.

Results: Total 60 participants (30 in case and 30 in controls) enrolled in study with mean age 49.5±5.9 years and male to female ratio of 2.3:1.Lipid profile such as total cholesterol (187±43. and 185.2±24.51), triglyceride (174±60.7 and 97±17), HDL (36±5.1 and 48.8±10.3), VLDL (34.88±12.15 and 19.3±3.49), LDL (116.49±38.34 and 116.8±26.78)were assess in case and control. There is significant reduction in HDL/TC ratio in patients (0.20±0.053) as compared tocontrols (0.28±0.07) with p value<0.001.Out of the 30 patients with CRF, 18 patients (60%) had LVH and among them 15 (83.3%) having severe CRF.

**Conclusion:** Difference in triglyceride, HDL and VLDL level was statistically significant in CKD patients and controls (p<0.05). Dyslipidemia in CKD increases risk of CVD.



#### STUDY OF DYSLIPIDEMIA IN PATIENTS OF HYPOTHYROIDISM

#### Dr Manan Dave, Dr Lalit Shrimali

Medicine, Geetanjali Medical College and Hospital, Udaipur

**Introduction:** Hypothyroidism is characterized by reduced thyroid activity resulting from less secretion of both T3 and T4. Thyroid hormones have significant effect on synthesis, mobilization and metabolism of lipids. Hypothyroidism is associated with elevation of low density lipoprotein (LDL) cholesterol levels, whereas high density lipoprotein (HDL) cholesterol concentration is usually normal or even elevated.

**Methodology:** A total of 60 that is, 30 cases of hypothyroidism and 30 euthyroid were studied at GMCH, Udaipur. A detailed history and thorough physical examination was done. Investigations such as haemogram, TSH, T3 and T4 fasting lipid profile were done.

**Results**-In our study, the highest no of patients were of age between 31-40 years (26.6% vs 29.3%). There was female (96% vs 93.3%) predominance in both hypothyroidism and euthyroid group respectively. In our study mean serum total cholesterol, LDL cholesterol and triaglycerides levels in cases and controls were  $209.84 \pm 56.63$  vs  $180.13 \pm 46.77$ mg/dl,  $114.26 \pm 27.80$  vs. $91.12 \pm 24.48$  mg/dL  $181.64 \pm 87.51$  vs $121.74 \pm 47.63$  mg/dl respectively with p values < 0.001 whereas HDL cholesterol was found significantly decreased in cases compared to controls (37.28  $\pm 6.38$  vs $46.2 \pm 6.03$  mg/dl with p value < 0.001)

Conclusion- This study it can be concluded that hypothyroidism is associated with lipid disorders that are characterized by normal or lightly elevated total cholesterol levels, increased LDL-cholesterol and lower HDL-cholesterol. Biochemical screening for lipid profile is critical in all patients of hypothyroidism.



## A STUDY OF ROLE OF SERUM TRANSAMINASES IN DENGUE FEVER

#### Dr Mayank Shukla, Dr Syed Javed

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**Introduction:** In patients with dengue fever, elevated serum transaminases levels may predict early liver cell damage.

**Objective:** We study the correlation between serum transaminases levels in patients of dengue fever.

Materials & methods: This study was done in a tertiary care hospital, Chennai. The study included 50 positive cases of dengue fever. The liver diseases with elevated serum transaminases other than dengue fever, history of concomitant diseases such as diabetes mellitus, acquired immunodeficiency syndrome (AIDS), hematologic disorders, cancer or cardiac disease, history of consumption of drugs which are hepatotoxic & history of fever excluding dengue fever were excluded in this study. The study was approved by the institutional ethical committee. Dengue fever was confirmed by immune-chromatographic method identifying the antibodies against dengue virus – IgM and IgG and dengue viral antigen – NS1. The SGOT, SGPT levels were estimated by enzymatic (kinetic) method. The SGOT, SGPT levels were estimated by kinetic method by adding 100μl of patient's serum with 1000μl of reagent and the concentration was read immediately in semi-automated analyser at 340nm wavelength with 1cm optical path at 37oC temperature.

**Methodology:** 50 patients of dengue fever admitted in Geetanjali medical college and hospital were studied. Detail history and clinical examination was done. Dengue fever is a dreadful viral disease in developing countries like India with high mortality. Dengue fever is a dreadful viral disease in developing countries like India with high mortality

**Results:** The SGPT levels were found to be elevated more in females when compared with males. The SGOT levels were found to be similar in both sexes. Overall, 80% of dengue fever cases showed increased SGOT and SGPT.SGOT was increased more compared to SGPT.

**Conclusion:** The study suggested that an increased level of serum transaminases is possible in dengue fever due to liver parenchymal damage caused by the virus. Estimating the levels of serum transaminases in dengue fever may help in early detection of liver cell damage.



#### COMPARISON BETWEEN RED CELL DISTRIBUTION WIDTH AND APACHE 2 SCORE AS PROGNOSTIC MARKER IN PATIENTS OF SEPSIS AND SEPTIC SHOCK

#### Dr Murugesh

Resident, Medicine, RNT Medical College, Udaipur

**Background:** Red cell distribution width has been proposed to independently predict the prognosis in patients of sepsis and septic shock. Inflammation and oxidative stress have been suggested to reduce RBC survival resulting in release of large number of immature RBCs.

**Objectives:** The aim of this study was to compare RDW and APACHE II score as prognostic markers in patients of sepsis and septic shock.

**Methodology:** This was undertaken in RNT Medical college- MBGH Udaipur from September 2017 to September 2018. A total of 50 cases of suspected/confirmed sepsis and septic shock were taken for the study after satisfying the inclusion and exclusion criteria.

**Results:** The RDW in non-survivors and survivors were  $18.2\%\pm4.6\%$  and  $14.8\%\pm0.8\%$  respectively. The APACHE II scores in non-survivors and survivors were  $22.50\pm5.72$  and  $11.2\pm2.8$  respectively.

**Conclusion:** RDW was found to be significantly higher in non-survivors as compared to survivors and correlated with APACHE II score.



### STUDY OF PATIENTS WITH DIABETIC NEPHROPATHY AND RETINOPATHY

#### Dr. Parth Vadhadia

Resident, General Medicine, GMCH, Udaipur

#### **AIMS & OBJECTIVES:**

- To study prevalence of retinopathy and nephropathy in Type 2 diabetes mellitus.
- Comparison of diabetic retinopathy and nephropathy in Type 2 diabetes mellitus.
- Correlation of diabetic retinopathy and nephropathy with duration of illness
- To study various risk factors that affects development, progression and severity of diabetic retinopathy and nephropathy

MATERIALS & METHODS: The present study was conducted in geetanjali medical college and hospital between December 2016 to December 2017. Total 100 patients with type-2 diabetes were selected. The data were collected and evaluated by reviewing case files and patient interview.

RESULT & CONCLUSION: Among 100 patients in study, 32 patients had diabetic nephropathy, 23 were male and 9 were female. Among 100 patients, 22 had diabetic retinopathy, 15 were male and 7 were female. Among patients with diabetic retinopathy, 68.18% patients had positive family history of diabetic nephropathy. Among patients with diabetic nephropathy, mean FBS was 207 mg%, PPBS was 317.8 mg% and mean HbA<sub>1c</sub> was 9.2%. Among patients with diabetic retinopathy, mean FBS was 211 mg%, PPBS was 324.9 mg%, HbA<sub>1c</sub> was 9.5%. From this study it seems that diabetic nephropathy progresses at a faster rate than retinopathy. In this study all patients with diabetic retinopathy had diabetic nephropathy but not all patients with diabetic nephropathy had diabetic retinopathy.



## INTENSIVE MONITORING OF ADVERSE DRUG REACTIONS IN INDOOR PAEDIATRIC PATIENTS IN A TTERTIARY CARE TEACHING HOSPITAL

#### Patel Kandarp<sup>1</sup>, Kanani Neeta<sup>2</sup>

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**Background:** Adverse drug reactions (ADRs) are a major source of concern in paediatric populationas they differ from adults in pharmacokinetic and pharmacodynamics responses. ADRs reported in adults do not predict those in children.

**Objective:** The aim of the study was intensive monitoring of adverse drug reactions in inpatients of paediatric department of tertiary care teaching hospital to asses ADRs in terms of incidence, causality, severity and preventability.

**Methodology:** A prospective observational single centre study was done in the paediatric department of SSG hospital, Vadodara over a duration of 8 months. The ADRs were actively monitored and collected reports were analysed for ADR pattern, demographic profile, causality, severity, and preventability.

Results: A total of 66 ADRs were documented during the period of 8 months. 53.03% ADRs occurred below the age of 1 year. 89.13% ADRs occurred due to antibiotics. 56.06% ADRs are of Diarrhoea and vomiting. 80.43% ADRs developed after receiving drug Intravenously. As per WHO-UMC criteria, 31 ADRs (46.96 %) were of probable while 34 ADRs (51.51%) were of possible causality while as per Naranjo scale 40 ADRs (60.61%) were of probable and 26ADRs (39.39%) were of possible category. 57.58% ADRs were of probable preventability. As per severity scale69.70% reactions were mild and 30.30 % reactions were moderate.

**Conclusion:** ADRs occurred more among infants and antibiotics were more commonly implicated. Most of the reactions were of mild severity and were probably preventable. Certain Precautionary measures can lead to significant prevention of ADRs in paediatric patients.



#### STUDY OF CLINICAL PROFILE IN PATIENTS OF ATRIAL FIBRILLATION AND ITS TRANSTHORACIC ECHOCARDIOGRAPHIC PRESENTATION

#### Dr Praharsh Pathak, Dr Abhijit Basu

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Background: Atrial Fibrillation is the most commonly encountered arrhythmia in our population. It is supraventricular event characterised by irregular heart rhythm due to altered atrial electrical and mechanical activity leading to decreased ventricular output and leading to formation of thrombus causing thrombotic events. There are many diseases, cardiac and noncardiac leading to developing of atrial fibrillation.

**Methodology:** A total of 50 patients of both sexes were studied. A detailed clinical history and examination was done. Diagnosis of atrial fibrillation was done on basis of electrocardiogram. Evaluation of etiology of atrial fibrillation was done by transthoracic echocardiography in all patients.

**Results:** Out of total 50 patients (16 males and 34 females), maximum patients were diagnosed as rheumatic heart disease (38/50) with female predominance, remaining 12 cases had non rheumatic etiology. Out of 38 patients of RHD, 36 had isolated mitral stenosis. Few patients had left atrial clot.

Conclusion: In our study, most common etiology was rheumatic heart disease. Rheumatic heart disease was found more in middle age groups and non rheumatic etiology in older age groups. Transthoracic echocardiography allows comprehensive and rapid assessment of anatomical structure and function of heart. Hence it is helpful for the clinician to start and alter the treatment approach.



#### PREVALENCE OF UPPER AND LOWER URAINARY TRACT INFECTION IN PATIENTS WITH CHRONIC KIDNEY DISEASE

#### Dr. Rahul Chaube

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**Objectives**: This study aims to understand the differences of demographic and urological variables between upper and lower UTIs in patients with CKD.

Methodology: A retrospective cohort study was conducted from 1 January 2017 to 31 December 2017 in patients with CKD requiring hospitalization in Geetanjali Hospital, Udaipur, Rajasthan. In this study, we retrospectively reviewed patients who had CKD with UTIs and compared patient demography, medical histories, and infecting bacteria between upper and lower UTIs

**Results**: A total of 276 bacteriuria patients were admitted to our ward with upper and lower UTIs. Of these 276 patients, 38 (13.8%) had stage I CKD (Cr 1.40  $\pm$  1.79), 91 (33.0%) stage II CKD (Cr 1.21  $\pm$  1.00), 102 (37.0%) stage III CKD (Cr 1.79  $\pm$  1.21), 37 (13.4%) stage IV CKD (Cr 2.94  $\pm$  2.26), and 8 (2.9%) stage V CKD (Cr 4.97  $\pm$  2.56). The average ages of the upper and lower UTI patients were 59.21  $\pm$  16.54 and 71.18  $\pm$  14.77 years, respectively.

Conclusion: This study shows that patients with CKD and UTIs were elderly, and that females were prone to have more bacteriuria and upper UTIs than males. In this study, we found that Escherichia coli were the bacteria infecting half of the patients regardless of sex. Patients who had renal stones were more prone to have upper UTI than other bacteriuria patients. We did not find any statistical differences of infective bacteria between the upper and lower UTI groups in patients with CKD.



## STUDY OF ASSOCIATION OF SERUM URIC ACID LEVEL WITH SEVERITY AND EXTENT OF CORONARY DISEASE IN PATIENTS WITH ACUTE CORONARY SYNDROMES

Dr. Raviraj Singh Ahada, Dr. D.P. Singh, Dr. Hemant Mahur, Dr. Ritul Rathore

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Background: Most epidemiological studies found a significant, graded, independent and specific association between the level of serum uric acid and cardiovascular morbidity and mortality. Uric acid (UA) takes part in cardiovascular diseases by inducing oxidative stress, inflammation, and endothelial dysfunction increased augmentation index and arterial stiffness in CAD patients, especially in the presence of ACS. Rise of serum uric acid by one mg/dL results in 26%increase in mortality. UA levels increase with the rise in the severity of coronary artery disease and were positively correlated with Gensini scores Survival of patients suffering from ACS with hyperuricemia is worse compared to those without hyperuricemia during ICCU hospitalisation

**Objective:** Correlation of Serum Uric Acid level in patients with acute coronary syndromes with severity and extent of coronary disease.

**Methodology:** Fifty patients with acute coronary syndromes between 35-60 years were included into the study. Patients with chronic kidney disease, gout, hematological malignancy, hypothyroidism, chronic alcoholism, were excluded. Data regarding history, ECG, cardiac enzymes, serum uric acid, and angiographic details were recorded.

**Results:** We noticed that there was no significant correlation of uric acid with number of vessels involved and Killip classification. Killip classification is an indicator of the severity of heart failure and high serum UA level in patients with acute myocardial infarction (MI) was associated with higher Killip class but not mortality in one study. We did not find similar observations in our study. Mean serum uric acid in killip class 1,2,3,4 are 4.89,5.40,4.63,5.31 respectively. Also we did not find significant correlation between number of coronary vessels involved and serum uric acid. Mean serum uric acid for vessels involved 0,1,2,3 is 5.05,4.95,5.25,5 respectively.

**Conclusion**: In the current study, serum UA level in patients with acute coronary syndromes is not associated with Killip class and extent of coronary vessels involved.



### PREVALENCE OFCELIAC DISEASE AMONG MALNOURISHEDCHILDREN

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1.Resident 2.Associate Professor 3. Professor, Pediatrics, Geetanjali Medical College and Hospital, Udaipur

Introduction: Celiac disease is an immune-mediated condition, characterized by an aberrant response of the small intestinal mucosal immune system towards components of gluten (and other proteins) in the food. Occur mostly in genetically susceptible individuals. Gliadin, a component of dietary gluten, found in wheat, barley, ryeand oats. It is the most common genetically conferred disorders characterized by abdominal pain, vomiting, constipation and extraintestinal problems.

Objective: To determine prevalence of celiac disease among malnourished children

**Methodology:** 201 Patients fulfilling selection criteria were included in the study. Clinical and dietary history was taken to determine cause of malnutrition. A detailed interview of all children/parents was conducted regarding symptoms associated with celiac disease. Blood sample of 2ml (Plain vial) was collected and sent for t-TGA by Elisa technique

**Results:** Celiac disease was present in 23.9% of malnourished patients.88(26.1%) were observed to be of age group 5-10 years. Disease observed more in male (51.2%) patients than female (48.8%).

**Conclusion:** There is a high prevalence of Celiac disease in malnourished children. Screening for Celiac disease should be an essential part of work-up in all malnourished children.



## PERINATAL OUTCOME IN PREGNANCY WITH HEART DISEASE AT TERTIARY CARE CENTER

#### Dr. Anuj Pandya

Resident, Obstetrics And Gynecology, Geetanjali Medical College and Hospital, Udaipur

**Background:** Cardiac disease is an important cause of maternal mortality and morbidity both in antepartum and postpartum period.

**Objective**: Objective of the present study was to determine the incidence, etiology and the type of the heart disease and maternal and fetal complication in pregnant women with heart disease.

**Methodology:** This study was conducted in the department of obstetrics and gynecology at Geetanjali medical college a tertiary care center Udaipur, 35 women with heart disease which were previously established or diagnosed during pregnancy were enrolled in the study over the period of 1 year.

Results: In 35 women pregnancies were complicated by the heart disease in the study. The incidence of the heart disease were less than 1%. The principle cause of of the cardiac lesion was Rheumatic Heart Disease (RHD) (62.86%). While congenital heart disease was seen in 8.57%. Among the women who had RHD, mitral stenosis seen in 27.7% was most common lesion followed by MR in 18.18% and 4.55% patients of aortic lesions and combined valvular heart lesion in 13.66%. 1 (2.86%) patient had maternal mortality due to pulmonary edema with severe MS. Majority of the patients belonged to NYHA class 1. 57.14% underwent caesarean section and 42.86% underwent vaginal delivery. In Maternal complications 45.71% had preterm deliveries and 40% had IUGR component. Various neonatal complications like low birth weight in 40% and prematurity in 34.29% and 14.29% required NICU admission, 11.43% were still births and one congenital heart lesion in 2.86%.



#### LAPROSCOPIC MANAGEMENT OF LARGE OVARIAN CYST

#### Dr. Pooja Patel

Resident, Obstetrics And Gynecology, Geetanjali Medical College And Hospital, Udaipur

**Introduction:** Laparoscopic has been progressively connected to various gynecologic issues with Phenomenal result and fast recovery. Large ovarian growths, a generally basic gynecologic issue, posses certain difficulties to laparoscopic administration.

**Objective:** The point of the present study was to summarize various articles on laparoscopic management for large ovarian cysts and condense their studies in regards to laparoscopic management and outcomes.

**Methodology:** A survey of 16 studies was performed utilizing the keywords: huge ovarian cysts, laparoscopy, an extra accumulation of reports was found by efficiently exploring all references from recovered papers.

**Results:** An aggregate of 16 study including 716 patients were recognized and postoperative complexity rates were 1.25% and 6.42% of the cases were changed over to Laparotomy. Marginal ovarian tumors and ovarian malignancy were distinguished in 3.07% and 3.21% of the patients. The incidence of marginal tumors and ovarian disease differed relying upon the selection criteria utilized for selection of patients with huge ovarian tumors for laparoscopic management.

**Conclusion:** Laparoscopy is a safe procedure even for large ovarian cysts and is associated with less complications and early recovery rates. The overall incident for finding ovarian malignancy is very low and its all depends upon the selection criteria of patients.



#### IMPACT OF PLANNED AMNIOTOMY ON NORMAL LABOUR- A RANDOMIZED CONTROL TRIAL

#### Dr Roma Dalal

Resident, Obstetrics and Gynecology, GMERS Medical College, Sola, Gujarat

**Objective:** Objective of the study was to determine the effectiveness of amniotomy alone on mean duration of labour and to find out the effect of planned amniotomy on obstetrical and perinatal outcome as compared to expectant management.

**Methodology:** This is randomized control study carried out between jan 2018 to oct 2018. As per the selection criteria, 250 women with singleton uncomplicated pregnancy with spontaneous onset of labour & allotted to either study group (ARM group) or control group (SRM group) equally. Amniotomy was performed with fingers or Kocher's forceps, under all aseptic precautions and progress of labour was observed.

**Results**: The mean duration of second stage of labour in ARM (49 MIN) and SRM(46 MIN) with p value(0.126) which is not significant

**Conclusion:** Amniotomy does not affect the total duration of labour however reduces the duration of active stage of labour and it does not affect the rate of cesarean section and the maternal and perinatal outcome.



## RETROSPECTIVE STUDY OF COMPLICATION ASSOCIATED WITH HYPERTENSIVE DISORDERS OF PREGNANCY AT GMCH – A TERTIARY REFERRAL CENTRE

#### Dr. Srushti Parmar

Resident, Obstetrics And Gynecology, Geetanjali Medical College and Hospital, Udaipur

**Background:** Hypertensive disorders of pregnancy (HDP) are a group of commonest medical complication in pregnancy and it is also a major cause of maternal mortality and morbidity.

**Objective**: This study aims to determine the prevalence of feto-maternal complication and correlation with severity of HDP.

**Methodology:** This was a retrospective study from January 2016 to December 2016 of ante-partum, intra-partum and post-partum cases of HDP with associated complication admitted at GMCH.

**Result:** Feto-maternal complications increases with severity of HDP. Early onset of HDP was also associated with increasing complication and poor fetal outcome.

**Conclusion:** HDP leads to progressive deterioration of fetal and maternal health which is only relieved by termination of pregnancy. Early detection and treatment can improve the feto-maternal outcome



#### STUDY ON SCOPE OF VISUAL IMPROVEMENT IN THE STUDENTS OF 3 BLIND SCHOOLS IN SOUTHERN RAJASTHAN

#### Dr Kiri Hardik Kumar

Resident, Opthalmology, Geetanjali Medical College and Hospital, Udaipur

**Objective:** To fulfill the unmet optical, medical and surgical need of students in blind schools.

**Methodology:** A total of 127 students of 3 blind schools of southern Rajasthan were included in study. Students were examined using a modified WHO/PBL eye examination record for children with blindness and low vision and management was advised as needed.

**Results:** Out of 127(n) students, 14 (11%) students benefitted with low vision aids, 4 (3%) students were prescribed vitamin A supplementation and 1 (0.8%) student was advised for cataract surgery.

Conclusion: Our study helped improve the quality of vision in 15% of total number of students examined. Hence similar studies should be encouraged to improve the quality of vision, thereby improving the quality of life of such visually impaired students all over the country.



#### A CLINICAL STUDY OF OPHTHALMIC MANIFESTATIONS IN HEMATOLOGICAL DISORDERS

#### Dr Mauli Shah

Resident, Opthalmology, Geetanjali Medical College And Hospital, Udaipur

**Objective:** To evaluate the spectrum of ocular involvement in hematological disorders and its clinical co-relation with coexisting blood picture presenting to a tertiary care Hospital.

Methodology: A total of 50 patients of age group between 8 to 70 years diagnosed with different types of hematological disorders were studied between January 2018 to October 2018 in Dept. of Ophthalmology. The study included freshly diagnosed cases as well as those receiving treatment. Both indoor and outdoor patients were examined. Detailed history including hematological and systemic examination findings and treatment history were recorded. A complete ophthalmic examination consisted of visual acuity assessment and slit lamp examination for ambulatory patients or torchlight examination for patients under isolation, and fundus examination with direct and indirect ophthalmoscope was done. Patients having diabetes, hypertension and cataract were excluded.

Results: Out of 50 patients (23 male and 27 female), 24 patients had hematological malignancies (Acute myeloid leukemia, Acute lymphoblastic leukemias, Chronic myeloid leukemia, Chronic lymphoblastic leukemia), 22 patients had anemia and 4 patients had thrombocytopenia. Retinal involvement was found in 23 (46%) patients (10 of hematological malignancies, 9 of anemias and 4 thrombocytopenia). Flame shaped hemorrhages followed by Roth spots were prevalent in most of patients with anemia & leukemia. Subconjunctival hemorrhages and Sub-hyaloid hemorrhages were common in patients of thrombocytopenia. Dilated and tortuous retinal vessels were common in anemia. One patient with Acute Lymphoblastic Leukemia had Vitreous hemorrhage and papilloedema.

Conclusion: Hence, all patients of blood dyscrasias especially hematological malignancies must undergo ophthalmic examination as secondary or indirect involvement of the retina is the most common eye change found in those disorders.



#### A STUDY OF PREVALENCE OF REFRACTIVE ERROR & UNMET NEED OF CORRECTION IN SCHOOL CHILDREN IN SEMI-RURAL UDAIPUR

#### Dr Seemal Goyal

Resident, Ophthalmology, Geetanjali Medical College and Hospital, Udaipur

**Background**: Refractive error (RE) is the main cause of visual impairment in school children. It may go unnoticed, causing poor performance in school and later life.

**Objectives**: To assess RE among students and the uncorrected RE.

**Methodology**: A Cross Sectional Observational study was conducted in 3 Govt. Schools in sub-urbanUdaipur over Jul-Aug 2017. Snellen's & Jaeger charts were used for visual assessment. Included: Age 6-12 yrs. Excluded: Malingering suspects

**Results**: 507 children were examined, 60 (11.83%) had vision<6/12 to 6/24 & 7 (1.38%) had< 6/24. 12 had (2.36%) non-RE causes.55 (10.84%) improved with PH and were determined to have RE. Improvement was 6/6 to 6/9 in 51 (10.05%) &<6/12in rest 4 (0.98%), presumably amblyopic. Only 3 had spectacles, rest 52 (94.54%) had the unmet need of correction. Referral compliance was low, only 5 reported in OPD.

**Conclusion**: Moderate RE is a common but rarely identified morbidity. A very significant proportion remains uncorrected in poorer sections of society.



#### ASSESSMENT OF SERVICES PROVIDED TO SCHOOL CHILDREN BY MOBILE HEALTH TEAMS UNDERRASHTRIYA BAL SWASTHYAKARYAKRAM (RBSK) IN UDAIPUR DISTRICT

Dr. PeeyushDamor<sup>1,</sup> Dr. Rupa Sharma<sup>2</sup>

1. Resident, 2. Professor, Community Medicine, RNT Medical College, Udaipur

Background: Rashtriya Bal Swasthya Karyakram (RBSK) was launched in February 2013. It aims at early detection and management of '4Ds'- Defects at birth, Diseases of childhood, Deficiency and Developmental delays including disabilities. in children age 6 to 18 years , Mobile Health teams (MHT) comprising of 2 AYUSH doctors ,1 ANM and 1 pharmacist screen School children for the 4 Ds. MHT has a pivot role for successful implementation of RBSKhence an insight in their structure and functions may help in quality assurance of screening.

**Objective:** To assess whether the MHTs are formed and functioning as per the RBSK Operational guidelines and to identify the bottle necks affecting screening quality.

**Methodology:** A cross sectional qualitative study done for two months in 2016in district Udaipur in 10 blocks at 60government schools (50%) selected by two stage Random Sampling,72 members of 20 MHT (two assigned at each block) were assessed using pretested semi structured questionnaire and standard checklist. Data analysed on SPSS 16.

**Results:** About 30% MHTs were lacked two AYUSH doctors. 61% MHT members had only average knowledge of RBSK. Main bottlenecks were logistic deficiency(55%), incomplete microplan (60%), no vehicles (15%), less time allotted (80.6%), lack of administrative support (70.8%), and poor response by school administration (14%).

**Conclusion:** Formation and functioning of MHTs was not in accordance with the RBSK operational guidelines. poor planning and lack of supportive supervision were main bottlenecks adversely affecting the quality of screening.



# A COMPARATIVE STUDY TO EVALUATE MENSTRUAL HYGIENE AMONG RURAL AND URBAN ADOLESCENT GIRLS AND ITS EFFECT ON REPRODUCTIVE HEALTH

Dr. Srishti Kukreja¹, Dr. Shakila Mulla²

1. Resident, 2. Associate Professor, Community Medicine, Jhalawar Medical College, Jhalawar

**Background:** Menstrual hygiene is fundamental to the dignity and well being of women and constitutes integral component of basic reproductive health services.

**Objective:** To evaluate menstrual hygiene among rural and urban adolescent girls and study its effect on reproductive health.

**Methodology:** A cross-sectional community based study was conducted in rural and urban school among 126 rural and 90 urban girls from class 8<sup>th</sup> to 10<sup>th</sup>. Data were collected using a pretested, semi-structured questionnaire. For qualitative research two focused group discussions were conducted, one in urban and one in rural school. Data so collected were entered in SPSS software(version 23) and analysed by using appropriate statistical tests.

Results: Mean age (years) of menarche in school girls of rural areas is 14.5 while it is only 12.45 in urban school girls. School girls of urban area have significant knowledge about the phenomenon of menstruation before menarche (rural 17.5%,urban 57.8%,p value <0.05). Lower abdominal pain unrelated to menstruation was more common in rural areas (rural 54.8% and urban 7.8%).100% urban school girls use sanitary napkins while 9.6% rural girls use cloth due to its unavailability in school.

**Conclusion:** Urban adolescent girls have better knowledge, higher use of sanitary napkins and better reproductive health as compared to rural adolescent girls.



#### A STUDY ON EFFICACY OF CYCLOSPORINE IN STEVENS JOHNSON SYNDROME AND TOXIC EPIDERMAL NECROLYSIS AT A TERTIARY CARE CENTRE

#### Dr Nitin Verma

Resident, Skin and V. D., RNT Medical College, Udaipur

**Background:** Stevens Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) are life-threatening dermatological emergencies. Many immunosuppressive modalities have been tried with variable results.

**Objective:** To determine the efficacy of cyclosporine in patients of SJS and TEN. **Methodology:** Study was conducted at a tertiary care teaching hospital from August 2015 to July 2018. Total body surface area (TBSA) assessment was done like any burn patients. Cyclosporine was administered in the dose of 5mg/kg body weight in 2 divided dosage and tapered or stopped once clinical signs of improvement were observed.

**Results:** Out of total 10 consecutive patients4 were males, 5 females and 1 of paediatric age group. Drug history was elicited in 7 patients( 4 patients were on antiepileptics). Two female patients were HIV positive and suspected to develop SJS due to ART (Anti Retroviral Therapy) drugs. All patients showed complete epithelialization in a mean duration of 10.9 days. Mean hospital stay was of 15.1days.

**Conclusion:** All 10 patients with SJS and TEN showed satisfactory improvement over variable period of time. This study definitely suggests that cyclosporine has encouraging role in the management of SJS, SJS-TEN overlap or TEN.



## PATTERN OF SEXUALLY TRANSMITTED DISEASES FROM A TERTIARY CARE TEACHING HOSPITAL OF SOUTH RAJASTHAN

#### Dr. Rekha

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**Introduction:** The trend of sexually transmitted diseases (STDs) varies in different parts of the country. A systematic, regional, periodic synopsis of the prevalence of STDs among STD clinic attendees would not only help to study the changing trend of STDs but also to assess the effectiveness of control programs.

**Objectives:** Study was planned to assess the changing trend of STDs at our tertiary care teaching hospital.

**Methodology:** This study was conducted at STD clinic of dermatology outpatient Department during 6 years from January 2010 to December 2015.

Results: A total of 9251 patients attended the STD Clinic. Male: Female ratio being 2:1. The majority of patients of either gender belonged to 25–44 years age group. The index study showed an increase in number of patients from 2010 to 2014 followed by a decrease in 2015. This change is reflected in the male:female ratio dropping from 2.3:1 in 2010 to 1.5:1 in 2015. Among nonulcerative STDs, candidal balanoposthitis (2704,29.22%) and candida vaginitis (1227,13.26%) was the most common in male and female, respectively. Among ulcerative group, genital herpes was the most common STD in both male (1646,17.8%) and female patients (607,6.56%).In total of 346 patients, 250 were newly diagnosed HIV, and remaining 96 cases were already on antiretroviral treatment

Conclusion: A marked decline in bacterial STDs, resulting in an apparent increase of the viral STIs. The prevalence was found higher among ulcerative STDs than in nonulcerative STD patients.



## LAPAROSCOPIC TRANSABDOMINAL PREPERITONEAL APPROACH FOR INGUINAL HERNIA REPAIR: A ONE YEAR EXPERIENCE

#### Dr. Kalpesh K. Patel

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**Introduction:** Laparoscopic hernia repair has emerged as an effective alternative method for treating inguinal hernias. It has several significant advantages over the tension-free open repair now in use. In this report we summarize our laparoscopic hernia repair results and Recommendations.

**Methodology:** The study was conducted as prospective, observational study on patient undergoing laparoscopic TAPP from November 2017 to November 2018 in department of general surgery GMCH.

**Results:** A total of 30 TAPP procedures was done till date. All are males with average age was 51.3 years. The mean length of hospital stay after surgery was 2.31 days. The mean duration of surgery was 50 min. one intraoperative and three postoperative complications was noted. One patient required conversion to open, with zero recurrences till date.

**Conclusion:** Laparoscopic TAPP hernia repair has proven to be an efficient method for the treatment of groin hernias at our institution.



## EFFICACY OF THE P-POSSUM SCORING SYSTEM AS A PROGNOSTIC INDICATOR IN PATIENTS UNDERGOING LAPAROTOMY

#### Dr. Karthic

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**Background:** Internationally reported mortality rates following emergency laparotomy ranges from 13% to 18% at 30 days. Reduction of the considerable morbidity and mortality is the focus of this study. P-Possum scoring provides a more realistic expectation of the patient's outcome. This study was undertaken to assess the validity of P-POSSUM in our setup where malnourishment, delayed presentation, limited resources are common and try to analyze the causes for poor outcome in high-risk groups.

**Objectives:** To evaluate predictive accuracy and efficacy in patients undergoing laparotomy and to assess validity in identifying risk factors for adverse outcome. Also to predict prognosis of patients and likely outcome in immediate post op period.

**Methodology:** This is a prospective study which includes a 30 day post operative follow up of each patient and were observed for development of any complication for a period of 1 month.

**Result:** We studied 100 laparotomy which resulted in 16 deaths and complications in 32 patients. On applying P-POSSUM no significant difference was found between expected and observed mortality(0.89) and morbidity rates(0.84).

**Conclusion:** This study suggests that P-POSSUM is an accurate scoring system for predicting post operative outcome and helps in clinical descision making and decreasing mortality in high risk patients undergoing laparotomy.



#### STUDY OF DEMOGRAPHIC PROFILE AND CLINICAL PRESENTATION OF PATIENTS OF ABDOMINAL TUBERCULOSIS

#### Dr. Manmohan Singh

Senior Resident, Surgery, AIIMS, Udaipur

**Background:** Tuberculosis, especially in developing countries is a major health problem, and causes significant morbidity. WHO declared it a global emergency and is the most important communicable disease worldwide. TB of the gastrointestinal tract is the sixth most frequent form of extra-pulmonary site, after lymphatic, genitourinary, bone and joint, miliary and meningeal tuberculosis.

**Objectives:** To study the demographic profile and clinical presentation of patients of abdominal tuberculosis.

**Methodology:** The study was conducted in 50 patients admitted in the Department of General Surgery in Maharana Bhupal Government Hospital, Udaipur. It included all patients diagnosed as abdominal tuberculosis. After admission of patient suspected to have abdominal tuberculosis in ward, detailed history, examination and specific investigation for diagnosis of abdominal tuberculosis was done.

Results & Conclusion: TB majorly affects the individuals between 20-40 years of age (46%) and is more common in males, low socio economic status and rural area. Sub acute intestinal obstruction was the most common type of clinical presentation present in 82% of cases. 10% cases presented with acute intestinal obstruction and 8% cases presented with perforation peritonitis. The commonest presenting complaint was constipation in 90% cases. Pain was found in 88% of cases. Vomiting was found in 48% cases. Constitutional symptoms like fever, sweats and weakness were found in 32% of cases.



# A COMPARATIVE STUDY OF INTRATHECIAL 0.5% ISOBARIC ROPIVACAINE VS 0.5% ISOBARIC LEVOBUPIVACAINE IN PATIENTS UNDERGOING ELECTIVE LOWER LIMB SURGERY

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Introduction: Spinal Anaesthesia is a safe, reliable and inexpensive technique with the advantage of providing surgical anaesthesia and prolonged post-operative pain relief. Till recently Bupivacaine 0.5% heavy was the only drug used for spinal anaesthesia. The S (-) enantiomer, 'Levobupivacaine' has been developed for clinical use as a long acting local anaesthetic .It has an improved safety profile over bupivacaine. Ropivacaine is also replacing bupivacaine as drug of choice in epidural and regional anesthesia. Ropivacaine has been shown to have an increased therapeutic index in human volunteer studies. Many studies have been conducted comparing the hyperbaric bupivacaine with isobaric ropivacaine but limited literature is available on the comparison of the isobaric form of these drugs.

**Objectives:** To compare the efficacy and safety of isobaric ropivacaine and isobaric levobupivacaine for lower limb surgeries.

Methodology: Prospective randomized double blinded Interventional study done in the Department of Anaesthesiology, SMS Medical College, Jaipur. After thorough preoperative examination and obtaining informed written consent from the patients, 60 patients will be randomly allocated into two groups of 30 patients each by chit in box method. GROUP A: will receive 3ml of isobaric 0.5% Levobupivacaine. GROUP B: will receive 3ml of isobaric 0.5% Ropivacaine. The onset of sensory and motor blocks, duration of sensory and motor blocks will be recorded in the two groups.

**Results:** Onset of sensory blockade was 12.9 min in levobupivacaine group and 14.9 min in ropivacaine group on average. While average time for onset of motor blockade was 12.3 min and 12.6 min respectively. The average duration of motor blockade was 306.1 min and 277.2 min for group A and group B respectively. No significant difference in heart rate blood pressure and Spo2 intraoperativly in two groups. No significant difference in side effect profile except more prevalence of pruritis in ropivacaine group.

Conclusion: In our study both intrathecal levobupivacaine and intrathecal ropivacaine were cardiac stable drugs with levobupivacaine having slightly faster onset of blockade and slightly longer duration of action in compare to ropivacaine, both drugs are very good for spinal anaesthesia and good alternative for bupivacaine, although some cases of pruritis were noticed with ropivcaine group, more study is needed to make conclusion in this aspect.



## STUDY OF A SILENT EMERGENCY IN PUBLIC HEALTH- THE MENACE OF ANTIMICROBIAL RESISTANCE IN SURGICAL PRACTICE

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**Background:-** SSIs are the foremost causes of post-operative morbidity. The present prospective study was undertaken to identify the risk factors, the causative bacteria and their antibiotic susceptibility patterns at a tertiary care teaching hospital in India.

Method:- 628 patients undergoing various abdominal surgical procedures admitted in Department of General Surgery over a 10 months period at Rabindranath tagore medical college, Udaipur, Rajasthan, were included in the study group. Infected wounds were studied bacteriologically. Samples such as wound swabs, pus from the infected wound site, blood or urine were collected as indicated. Direct staining, aerobic bacterial cultures and identification followed by antibiotic sensitivity testing were performed and the results analysed.

Results:- The overall infection rate of 12.74% was observed among 628 patients included in the study. A higher SSI rate was observed in cases of emergency surgeries and with increasing degree of wound contamination. Prolonged duration of surgery and drain usage contributed significantly to the incidence of SSI. The most common isolate was E.coli followed by S.aureus. A predominance of Gram-negative bacteria in causing infection was observed.

Conclusion:- A high incidence of SSI, especially in clean interventions (2.37%), emphasises the importance of implementing active SSI surveillance in surgical wards so as to obtain standardised incidence ratio targeting modifiable risk factors. Emergency surgeries, duration of surgery, and drain usage were a few identified risk factors. E.coli was the commonest isolate (53.75%). Drug regimens using amoxicillinclavulanate for postoperatively coverage after surgery need to be carefully and urgently revised for controlling SSIs in our hospital, considering the high level of resistance observed.



#### EFFICACY AND TOLERABILITY OF OLMESARTAN, TELMISARTAN, AND LOSARTAN IN PATIENTS OF STAGE I HYPERTENSION: A RANDOMIZED, OPEN-LABEL STUDY

#### Shah Arth, Basu Abhijit

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**Objectives:** To compare the efficacy and tolerability of losartan, telmisartan, and olmesartan as antihypertensive agents and evaluate and compare their effects on lipid profile and blood glucose.

Materials and Methods: This was a randomized, open-label, parallel-group, comparative study conducted in sixty patients of Stage I hypertension. The eligible patients were randomly allocated into three treatment groups: (1) Tablet olmesartan (20 mg), (2) Tablet telmisartan (40 mg), and (3) Tablet losartan (50 mg). Blood pressure (BP) was assessed at an interval of 2 weeks for 3 months. Fasting blood glucose (FBG) and lipid profile were estimated at baseline and then at 12 weeks.

**Results:** Olmesartan and telmisartan were more efficacious than losartan in reducing diastolic BP (DBP). There was a statistically significant decrease in mean blood glucose level (P< 0.02) after 12 weeks of treatment in telmisartan group when compared to baseline. Serum total cholesterol, triglycerides, and low-density lipoproteins decreased significantly after 12-week treatment with olmesartan and telmisartan.

**Conclusions:** The most efficacious drug in reducing BP is Olmesartan whereas telmisartan and losartan show equal efficacy. Telmisartan shows the most favorable effects on FBG and lipid profile.



## PREVALENCE OF MENSTRUAL IRREGULARITIES IN WOMEN WITH ABNORMAL UTERINE BLEEDING (AUB) - AN OBSERVATIONAL STUDY

#### Dr Priyanka Burdak

Resident, GMCH, Udaipur

**Background:** Menstrual disorders are common gynecological problem for medical visits among women of reproductive age. Heavy menstrual bleeding affects up to 30% of women in their reproductive period. Abnormal Uterine Bleeding may be defined as any variation from the normal menstrual cycle such as changes in regularity and frequency, duration of flow or amount of flow and it accounts for one third of patients to visits gynecologists. It occurs in 9-14% of women between menarche to menopause, significantly impacting quality of life and imposing financial burden.

METHODOLOGY-The present study was undertaken in Gynae OPD, GMCH, during 2017-2018 to find out prevalence of menstrual disorders in reproductive women with Abnormal Uterine Bleeding. Out of 7471 patient of different gynaec complaints 1362 (18.23%) patients both unmarried and married were found with various menstrual disorders. A detailed history regarding the age, menstrual irregularities like frequency of cycle, duration of flow and amount of flow were enquired and recorded. The data presented in the study are based on clinical examination and on history

RESULTS: Prevalence of menorrhagia was high as compared to other Abnormal Uterine Bleeding, followed by oligomenorrhoea, polymenorrhoea, Dysfunctional Uterine Bleeding and hypomenorrhoea. Out of 7471gynecological patients 1362 were found with Abnormal Uterine Bleeding. Out of 1362 patients of Abnormal Uterine Bleeding, 450 (33%) had menorrhagia followed by 272 (19.97%) had oligomenorrhoea, 250 (18.35%) had polymenorrhoea, 228 (16.74%) patients had dysfunctional uterine bleeding and least i.e. 162 (11.89%) patients had hypomenorrhoea. Out of 450 patients of menorrhagia maximum patients were found in the age group of 25-34 years i.e. 177 (39.33%) followed by 120 i.e. 26.66% in the age group of 35- 44 years, 101 patients i.e. 22.44% were in the age group of 15-24 years and least belong to age group of 45-54 years i.e. 52 (11.55%).







#### STUDY OF EPIDEMIOLOGICAL PROFILE OF H1N1 CASES AT TERTIARY CARE HOSPITAL IN SOUTHERN RAJASTHAN

#### Dr. Bhumika Vageriya, Dr. Anshu Sharma

Microbiology, RNT Medical College, Udaipur, Rajasthan

**Objective:** To study the Epidemiological profile (Age, Sex and Geographical distribution) of H1N1 cases in Southern Rajasthan from August 2017 to August 2018 at RNT medical college Udaipur.

Materials & Methods: Epidemiological characteristics of Influenza A H1N1 cases in Southern Rajasthan from August 2017 to August 2018 were prospectively analyzed using data from the swine flu laboratory at the RNT medical college Udaipur. Viral-RNA was extracted using HiMedia kit and ABI step-one RTPCR was performed to detect Influenza virus.

Results: At RNT medical college from August 2017 to August 2018, a total of 1671 patients were tested for Influenza A H1N1 of which 39.97% (668) were found to be positive for Swine flu .Maximum cases (40%) were detected in the month of September 2017 and patients of 15-45 years of age accounted for 65.8% (1100) of the cases .Males accounted for 49.01% and Females 50.98%, Maximum cases were fond from Chittorgarh (34.9%) followed by Udaipur (31.9%), Rajsamand (12.9%), Pratapgarh (10.5%).

**Conclusion:** Such surveillance data are helpful in global influenza vaccine preparation and for any pandemic preparedness activity. It is also useful in preparedness of seasonal epidemics.



### SEROPOSITIVITY OF SCRUB TYPHUS IN TERTIARY CARE HOSPITAL IN SOUTHERN RAJASTHAN

Dr. Seema Sonkariya, Dr Anshu Sharma

RNT Medical College, Udaipur

**Introduction:** Rickettsial infections are being increasingly recognized as a cause of acute febrile illness and should be considered as a distinct possibility in patient presenting with suggestive clinical feature. Scrub typhus is a zoonotic disease and is one of the most covert emerging and re-emerging rickettsial infection.

**Objectives:** To diagnose seropositivity of scrub typhus in clinically suspected cases and prevalence in male and female.

**Methodology:** This study was conducted on serum sample from clinically suspected cases, collected over a period of 9 months (from Jan.2018 – Sep. 2018) for detection of IgM antibody by ELISA.

**Results:** Out of 854 sample tested, 500 were female patients and 354 were male patients. Total 305 samples were positive (35.71%) for scrub typhus IgM ELISA test, in which 192 were females and 113 were males.

**Conclusion:** There is an increase in seropositivity of scrub typhus therefore should be included in the differential diagnosis of fever of unknown origin (PUO)along with dengue, malaria which are other common endemic infection in this part of country.



## TO IDENTIFY BACTERIAL ISOLATES IN PUS SAMPLE & STUDY THEIR ANTIBIOTIC SUSCEPTIBILITY PATTERN AT TERTIARY CARE HOSPITAL IN SOUTHERN RAJASTHAN

#### Dr. Shubhangi Sharma, Dr Anshu Sharma

Microbiology, RNT Medical College, Udaipur, Rajasthan.

**Objectives:** The aim of the study was to identify bacterial isolates & it's susceptibility pattern in southern Rajasthan. Archived pus culture data obtained from MBGH, RNT Medical College Rajasthan Sept.2017 to Sept.2018.

Materials & Methods: A total of 211 pus samples were included in the study, from patient attended MBGH at R.N.T. Medical College, Udaipur. Bacterial isolates obtained were identified using various phenotypic methods (Biochemical reactions & Antibiotic susceptibility test). Antibiotic susceptibility test was performed by Kirby—Bauer disc diffusion method on Mueller-Hinton Agar.

Results: out of total of 211 sample; Staphylococcus aureus was most commonly isolated (24.6%) followed by Escherichia coli (17%), Pseudomonas sp. (10.8%), Methicillin sensitive staphylococcus aureus (9%), Methicillin resistant staphylococcus aureus (6%), Klebsiella (6%) among others. Among Gram positive cocci Amikacin was found to be highly sensitive and for Gram negative bacilli Meropenem was found to be highly sensitive.

Conclusion: There was a high resistant rate toward different antibiotic & their study give a good guide to the clinician to propose an empirical treatment for the patients. Meropenem should be kept in reserve for resistant cases.



### ROLE OF TRACE ELEMENTS IN PATIENTS OF MYOCARDIAL INFARCTION IN SOUTHERN RAJASTHAN

#### Dr Ruchi Jindal, Dr Manmohan Jindal

Biochemistry, Geetanjali Medical College, Udaipur

Introduction: cardiac diseases are major cause of morbidity and mortality contributing to 20-25% deaths in the developed world affecting mostly young and middle aged (30-69 yrs) population. Large number of Researcher has reported different parameters such as serum level of CALCIUM, MAGNESIUM and ZINC but still the relationship of these metals have not been established in the patients of MI in this region of Rajasthan hence this study was undertaken.

**Objectives**: To determine serum levels of Zn, Ca and Mg in Myocardial Infarction patients.

Material and Methods: Study includes patients of acute myocardial infarction (AMI) which were confirmed by cardiologist based on ECG and other clinical findings who visited cardiology OPD of Geetanjali hospital from 2017 to 2018. Serum magnesium was done by Calmagite method, serum Zinc was done by Johnsen and R.Eliasson 1987, serum calcium done by Gitelman H.J, 1967.

**Results**: In patients we have found increase level of calcium and decreases level of zinc and magnesium. We have found a significant p- value when compare this with controls.

Conclusion: From the present study it may be concluded that altered levels of zinc, calcium and magnesium may have a role in the development of myocardial infarction.



#### A COMPARATIVE STUDY OF SERUM URIC ACID IN ALZHEIMER'S DISEASE PATIENTS WITH HEALTHY CONTROLS AT SMS HOSPITAL, JAIPUR

Dr. Chattree Chaitanya¹ and Dr Saxena Ajay²

<sup>1</sup>Resident(JR-2), Biochemistry, SMS Medical College, Jaipur; <sup>2</sup> Senior Demonstrator, Biochemistry, SMS Medical College, Jaipur

Background: Alzheimer's disease (AD) is the most common neurodegenerative dysfunction of the central nervous system, characterized by brain atrophy and accumulation of amyloid-plaques and neurofibrillary tangles throughout the cortex by the end of the disease. It has been suggested that oxidative stress and impaired energy metabolism play an important role in the pathogenesis of Alzheimer's disease. Evidences suggest that uric acid being an antioxidant may modulate outcome in neurological diseases like Alzheimer's disease.

**Objectives:** To assess and compare serum uric acid level of healthy controls and patients suffering from Alzheimer's disease and to correlate serum uric acid levels in patients of Alzheimer's disease on basis of MINI MENTAL SCALE EXAMINATION (MMSE) determined by a Psychiatrist.

**Methodology:** After taking necessary permissions, a cross sectional study was conducted at Department of Biochemistry and Department of Psychiatry, SMS Hospital, Jaipur. Serum uric acid of 110 Alzheimer's disease patients and healthy controls was assessed by modified trinder method in which uric acid reacts with uricase and peroxidise enzyme to form a chromogen.

**Results:** There was no significant difference between AD and control groups for age (p=0.211) and gender (p=0.901), respectively. Serum UA is lower in the AD group  $(4.72 \pm 1.33)$  compared to control group  $(5.66 \pm 1.17)$ . The difference was statistically significant (p<0.05) and the values are within the normal physiological reference range. However there was no correlation seen between MMSE scores and uric acid.

**Conclusion**: Uric acid may be beneficial as antioxidant in Alzheimer's disease.



#### MALIGNANT RHABDOID TUMOR OF KIDNEY: A CASE REPORT

Dr. Deergha Singh, Dr N Mogra, Dr Vivek Jain, Dr. Tarang Patel Pathology, Geetanjali Medical College and Hospital, Udaipur (Rajasthan)

**Introduction:** Malignant rhabdoid tumor (MRT) is a rare entity and one of the most aggressive and lethal malignancies in pediatric oncology. These tumors are characterized genetically by deletion/ mutation of *SMARCBI/INI* gene located on chromosome 22q 11.2.

Case Study: This is a case of six months old male child who presented with complaints of abdominal lump, fever and hematuria associated with abdominal distension of 7 days duration.

The local examination revealed a hard tender lump in the right lumbar region extending into the right iliac fossa. Ultrasonography of the abdomen revealed a large mass lesion involving right kidney. CT Abdomen & Pelvis – revealed a fairly large lobulated heterogeneously enhancing mass (82 x 55 mm) almost completely involving the right kidney. The patient was diagnosed clinically as stage III Renal tumor and subsequently underwent Right Extended Nephrectomy.

The gross examination of the specimen revealed a well circumscribed mass measuring 9.1x6x6 cm involving the entire kidney having grey white, firm, irregular cut surface with areas of haemorrhage and necrosis. Microscopic examination revealed Malignant Rhabdoid Tumor of the kidney with loss of INI 1 on immunohistochemistry.

Conclusion: Malignant rhabdoid tumor occurs slightly more frequently in male individuals than in female individuals as is evident in this case. Loss of INI1 is a characteristic immunohistochemical feature of this tumor.



#### WILM'S TUMOUR

Dr.Kavita Choudhary, Dr. Kaustubh Singh, Dr. Monika Shroff
Pathology, GMCH, Udaipur (Raj)

**Introduction:** Wilm's tumor is most common among under five children with renal cancer. About 10% associated with dysmorphic syndromes: WAGR Syndrome, Deny's - Drash syndrome, Beckwith - Wiedemann syndrome, Familial nephroblastoma.

Case: We present a case of pediatric female patient of 18 month who presented with right sided palpable abdominal mass with hematuria, cried at each time of urination, weight loss, fever and constipation. Wilm's Tumour was confirmed by CT-Scan and histology.

Conclusion: Practitioners and patients need to be aware of the initial clinical signs if the child gets hematuria, fever and loss of appetite. Ultrasound show large soft tissue mass heterogeneous echogenicity, which represents hemorrhage, necrosis or calcification. Microscopically triphasic component is seen mesenchymal, blastemal and epithelial components are seen. With 70% blastemal component; diffuse anaplasia is noted, capsular invasion is seen; Gerota's fascia is involved by tumor.



### HAEMATOLOGICAL, COAGULATION AND CLINICAL PROFILE CORRELATION IN MALARIA

Dr. Manu Jethalya, Dr. Saurabh Totla, Dr. Manisha Jain *Pathology, GMCH, Udaipur* 

**Background**: Malaria is of immense importance amongst the tropical diseases in india. Malaria is a protozoan disease caused by plasmodium species (p.falciparum, p.vivax, p.ovale, p.malariae, p.knowlesi) transmitted by the bite of infected female anopheles mosquitoe. P.vivax and p.falciparum malaria is endemic in India.

**Objectives:** To study symptoms and signs in patients of malaria. To determine the hematological and coagulation abnormalities in patients of malaria. To correlate haematological, coagulation and clinical profile with severity and final outcome.

**Methodology**: The present study is a prospective study carried out in GMCH, Udaipur for a period of three months from July 18 to September 18 over 54 patients with fever and proven to have malaria and underwent complete haemogram, bt, ct, pt, aptt and thorough clinical examination.

**Result**: Out of 54 patients 42 were p.vivax, 10 were p. flciparum and 2 were mixed. Male: female = 4:1. Fever was present in 97% cases. Thrombocytopenia was observed in 91% of patients. Anaemia was predominantly observed in p. falciparum. Decreased hematocrit is significant in p.vivax. Prolonged pt and aptt observed in p. falciparum. Splenomegaly in 54% cases. Chills and rigors in 62% cases.

**Conclusion**: Anaemia and fever with chills & rigors are the most common clinical presentation. Thromocytopenia, decreased haematocrit and prolonged pt and aptt are correlated with degree of parasitemia.



#### CHRONIC NEUTROPHILIC LEUKEMIA -A RARE MALIGNANT DISORDER

Dr Megha Agarwal, Dr ML Yadav, Dr BP Nag

Mahatma Gandhi Medical College and Hospital, Jaipur

**Introduction:** CNL is an uncommon myeloproliferative neoplasm characterized by sustained mature neutrophilic leukocytosis, hepatosplenomegaly and bonemarrow granulocytic hyperplasia.

Case: A 33 year old male presented with complaints of fatigue from 3 months, low grade fever from 1 month and myalgia from 8 days. No history of jaundice, weight loss and cough. CBC shows leucocytosis (TLC-51.83x 103 /cu mm) with predominant neutrophilia. Oral antibiotics has been prescribed for 7 days but symptoms did not relieved and persistent leucocytosis was present. On general and systemic examination only splenomegaly was present rest all normal. On blood investigation-Leucocytosis (TLC - 50.00 x 103 /cu mm) with predominantly neutrophilia. In PBF morphology of neutrophils were normal with segmented and band cells present. There were no myeloblasts present in the peripheral blood. ESR was highly raised. RFT and LFT were normal along with normal Chest X-ray. Blood culture and urine culture were sterile. LAP score was normal. S. Procalcitonin - Negative. Bone marrow aspiration showing hypercellular marrow with features of chronic myeloproliferative disorder. All investigation fulfilled the WHO diagnostic criteria for chronic neutrophilic leukemia and thus diagnosis of CNL was made.

**Discussion:** CNL is an uncommon myeloproliferative neoplasm characterized by sustained mature neutrophilic leukocytosis, hepatosplenomegaly and bone marrow granulocytic hyperplasia. In contrast to chronic myeloid leukaemia, the disease primarily involves neutrophilic lineage with persistent proliferation of mature forms of neutrophils.

**Conclusion:** Chronic Neutrophilic Leukemia, although rare should be considered in patients with persistent leucocytosis with neutrophilic predominance.



#### CASTLEMAN'S DISEASE- A RARE CASE REPORT

#### Dr Monika Shroff, Dr Kavita Choudhary

Pathology, GMCH, Udaipur

Castleman's disease is a rare lymphoproliferative disorder, which usually occurs in the chest. The castleman's disease is often asymptomatic, but it can cause nonspecific thoracic symptoms such as cough and dyspnea. 36 year old female patient presented to our institute with complaints of Left sided chest pain and backache for 2 months. CT thorax revealed a well-defined lobulated soft tissue density lesion of  $7 \times 6 \times 5$  cm in the posterior mediastinum. The entire tumour was removed along with its capsule and soft tissue. The microscopic features were characteristic of the hyaline vascular type seen in Castleman's disease.



## OCCULT FOLLICULAR CARCINOMA OF THYROID PRESENTING AS SKULL BONE METASTASIS: A RARE CASE REPORT

Dr. Pramila Choudhary

 $Pathology,\,SNMC,\,Jodhpur$ 

Follicular Thyroid carcinoma (FTC) is a well differentiated tumor and second most common cancer of the thyroid after papillary carcinoma. They account for 5 to 15% of primary thyroid cancers. Most patient present with a thyroid swelling, only upto 11% patient present with distant metastasis. Skull is a rare site for metastasis. The incidence of skull metastasis of FTC is about 2.5% and in most cases, metastasis occurred after the diagnosis and treatment of primary tumor; but in few cases, skull metastasis was the first presentation of an occult FTC. We report a case of 63 year old female presenting with headache since 6 months and swelling in right parietal vertex region since 1month. Neuroimaging showed calvarium based intradiploic extradural lytic expansile lesion, which on histopathology showed the features of metastatic follicular carcinoma from thyroid, which was confirmed by Immunohistochemistry (TTF-1). Thyroid examination and thyroid function tests were normal. Subsequent work up revealed an occult primary follicular carcinoma in thyroid.



#### A CASE OF ADRENAL CORTICAL NEOPLASM ACCORDING TO WEISS SCORING

Dr. Shreya Agarwal, Dr BP Nag, Dr ML Yadav, Dr Abha, Dr Shubham Garg Pathology, Mahatma Gandhi Medical College and Hospital, Jaipur, Rajasthan

**Introduction**: The finding of adrenal mass should induce diagnostic work up aimed at assessing autonomous hormone production and differentiating between benign and malignant lesions. The weiss system appears to be most commonly used method for differentiating benign and malignant adrenal tumours.

Case Report: A 44yr old male presented to Mahatma Gandhi hospital and college with complain of hypertension and abdominal pain since 1yr and right flank pain and headache since 1 month.

USG/CT suggested of right adrenal mass. No history of paroxysmal episode. On investigation CBC, LFT, RFT were normal. Serum cortisol level is 8.72 microgram, free plasma metanephrine is  $57.2~\rm pg/mL$ . Biopsy was suggestive of adrenal cortical neoplasm. Weiss score 3

**Discussion**: It is benign neoplasm arising from adrenal cortical cell, may or may not be functional, more common in female and adult. True incidence is unknown because many are functional estimates include 8.7% in autopsy series and 4% in radiology series. Weiss system is most used criteria, criteria of equal or more then 3 indicates malignancy.



## FREQUENCY OF ABO AND RH BLOOD GROUPS IN BLOOD DONORS IN RNT MEDICAL COLLEGE UDAIPUR (RAJ.)

#### Dr. Rajesh Kumar

Department of Immunohematology and Transfusion Medicine, RNT Medical College, Udaipur

**Introduction:** ABO and Rhesus blood group vary from place to place and person to person.it is most important for blood transfusion, organ transplantation and genetic study.

**Objectives:** Documentation of different types of blood group among blood donors in RNT Medical college Udaipur Rajasthan.

**Material and Methods:** Data collected from 1<sup>st</sup> jan2018 to 31<sup>st</sup> October 2018 (retrospective study for 10 months) from department of Immunohematology and Transfusion Medicine, RNT Medical College, Udaipur (Raj.).

**Result:** During our study it is observed that total number of blood donation during this period was 18302, out of which voluntary donor was 9223(51%) and replacement donor was 9079(49%). our study revealed that commonest blood group was O(36.34%) followed by B (32.14%), A (23.10%) and AB (8.42%). Rh positive blood group were 88.3% and Rh negative blood group were 11.7% respectively.

**Conclusion:** This study is very important as it provide distribution of blood group in our population and provide adequate and prompt supply of blood and blood component of different groups in different emergencies and motivate the donors especially Rh negative blood group donor to donate blood.



#### A STUDY ON BURDEN OF VIT-B12 DEFICIENCY IN ELDERLY POPULATION IN UDAIPUR

#### Dr. Akhlaq Hasan, Dr A.K. Verma

Department of Biochemistry, RNT Medical College, Udaipur (Raj)

**Introduction:** Vitamin b-12 deficiency is common in elderly (age more than 60 years) population. Its deficiency leads to several neurological manifestations. The diagnosis is frequently made on basis of a low serum vit b12 or megaloblastic bone marrow or both.

**Aims/objectives:** To estimate the prevalence of vit b12 deficiency and its common risk factors in elderly patients attending the tertiary care hospital in Udaipur.

**Methodology:** The study was done on 50 elderly patients and 50 controls visiting mb hospital Udaipur. Estimation of serum vit b12 levels was done by roche elecsys modular cobas e 411 using electrochemiluminescence assay.

**Result and conclusion:** Finding showed that mean value of serum vit b12 in elderly pts (168.5±0.5)pg/ml was significantly lower than control mean value (213±0.8) pg/ml. Deficiency of vit b12 should be prevented for overall benefit of health.



#### PHARMACOVIGILANCE PROGRAMME OF INDIA (PVPI)

#### Dr. Amit Bhimawat

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**Definition**: Detection, assessment, understanding and prevention of ADRs and any drug related problem is Pharmacovigilance (WHO).

**Objectives**: Monitoring of known and unknown ADRs, TO know about interpopulation variation of drug effects, and to take action if any.

**Need of programme**: Data available regarding drug safety by clinical trials are not complete.

**Evolution of programme**: Begins with 12 ADR monitoring centres (1986) to PvPI (2010)

Current Issues of interest: Currently its concerns have been widened to include ADRs related to HerbalsTraditional and complementary medicines, Blood products, Medical devices, and Vaccines.

Reporting Personals: Doctor, Dentist, Nursing staff, Pharmacist, Patient.

**Reporting system**: Reporting personals to ADR monitoring centres (AMC). AMCs to National Coordination Centre (NCC) Ghaziabad. NCC to Central Drug Standard Control Organization (CDSCO) New Delhi. NCC and CDSCO communicates with Uppsala monitoring centre Sweden.

Laws and confidentiality: Identity of reporting personal is kept confidential and they are not liable for any legal action.



## KNOWLEDGE AND AWARENESS REGARDING MEDICATIONS USAGE IN PREGNANT WOMEN AT A TERTIARY CARE HOSPITAL IN NORTHERN INDIA

#### Amiya\*, Kaushal J\*\*

Resident\*, Professor \*\*, Pharmacology, Pt. B.D. Sharma PGIMS, Rohtak, Haryana, India

**Background:** Drug prescribed during pregnancy may produce side effects & can affect the foetus particularly in first trimester when organogenesis takes place. So, careful consideration of intake of the drugs by pregnant mothers is required.

**Aim:** The present study was conducted with an objective to assess the awareness of drug usage in pregnancy.

**Methodology:** This was a prospective, observational, cross-sectional study conducted on randomly selected 100 pregnant women attending a tertiary care hospital in Rohtak, Haryana, India. Data was collected by means of a pre-designed semi-structured questionnaire composed of 20 questions.

Results: The average age of the participants was 23.7±3.68 years. 82% were aware of the fact that drugs can be useful during pregnancy while only 64% knew that drugs can be harmful during pregnancy. 70% were aware that drugs can be harmful to foetus, only 33% had the knowledge that drugs can be harmful to both mother and foetus. 20% were not aware regarding any method of contraception. There was no knowledge regarding oral contraceptive pills, intrauterine contraceptive devices, injectable contraceptives&barrier methods in 40%, 61%, 87% & 20% of women respectively. About 20% each were not taking medications on regular basis, not getting immunisation as guided by doctor&were not aware about the need of regular antenatal check-up

**Conclusion:** There is a lack of awareness amongst the pregnant women regarding the fact that drug use during pregnancy can be harmful. Lack of awareness on safety of drugs in pregnancy and contraceptive use advocates a need for educating and counselling women of child bearing ages.



### A RARE CASE OF BILATERAL MEDIAL MEDULLARY SYNDROME

#### Shah Arth (1), Basu Abhijit (2)

1-Resident, General Medicine;

2- Professor, General Medicine, Geetanjali Medical College and Hospital, Udaipur, India.

Bilateral medial medullary syndrome is a very rare type of stroke with catastrophic consequences. Early diagnosis is crucial. Here I present a case of 50 year old male with complaints of Gabharahat and burning all over the body. Then he suddenly developed quadriplegia, difficulty in swallowing, weakness in toungue muscle and difficulty in breathing. He had prior history of HTN and DM type 2. MRI brain with MRA and neck angiography was advised MRI brain showed characteristic "heart shaped" infarct on diffusion wighted (DWI) image and bilateral medial medullary stroke was confirmed. MRA of head and neck was normal. Lumbar puncture was performed which showed normal cells, protein, and Glucose. Blood and CSF culture was normal. NCV of all four limbs was performed and was normal. Bilateral medial medullary stroke is missed sometime because of symmetric and midline pattern of abnormal signal and similarity to artefact.



## A STUDY OF SERUM VITAMIN B12 LEVEL IN PATIENTS WITH ACUTE ISCHEMIC STROKE

Dr. Ashok kumar Yadav, Dr. Mehul M. Prajapati, Dr. Neera Samar, Dr. R.L. Meena

Medicine, RNT Medical College, Udaipur

**Background**: Ishemic stroke is one of the leading cause of mortality in India. Vitamin B12 is a co-factor in homocysteine metabolism. Deficiency of vitamin B12 causes Hyperhomocysteinemia which increases risk of stroke due to atherogenicity.

Aim: A study of serum vitamin B12 level in patients with Acute Ischemic Stroke

Methodology: This was a single centered, randomized prospective case control study which was done at Maharana Bhupal Government Hospital, RNT Medical College, Udaipur From July 1, 2015 to November 30, 2016.100 patients with acute ischemic stroke presenting within 5 days of onset of symptoms of stroke were included and were compared to the 100,age and sex matched controls. Each case was evaluated by brain Computed Tomography(CT) or MRI Brain within 24 hours of admission.

**Results:** Of 100 patients studied, 67 patient had Vitamin B12 deficiency of 100 controls, 54 had vitamin B12 deficiency. Mean serum vitamin B12 level was 225.31+/-145.78 pg/ml in cases and in control was 331.38+/-235.79 pg/ml. Thus vitamin B12 level was significantly lower in cases than in controls.

Conclusion: Substantial decreases in vitamin B 12 level in cases with acute stroke occurs as compared to healthy control but there is no correlation seen between serum vitamin B12 level and age, sex, dietary pattern, smoking and alcohol consumption by patients.



### CHOREA AS AN ATYPICAL MANIFESTATION IN A PATIENT TREATED FOR NEUROPARALYTIC SNAKE BITE

#### Jain A, Singh DP

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Snake venoms are highly variable and complex mixtures of enzymes, low molecular weight polypeptides, glycoproteins, and other constituents. The treatment for a venomous snakebite resulting in significant envenomation is prompt administration of specific antivenom. A 55yr old female with a history of admission and discharge from the hospital on 27th September 2018 for neuroparalytic snake bite and received mainly Anti snake venom and Neostigmine as the treatment, presented on 1st October with complains of fever since 3 days and abnormal body movements since past 2 days. The patient was initially started on broad spectrum antibiotics, antimalarials and sodium valproate for choreiform movements. Apart from routine investigations, which only revealed a Raised leukocyte count, CSF analysis was done which revealed raised protein and normal sugar levels and a lymphocytic cellular picture. MRI was done which revealed abnormal signals in the bilateral basal ganglia and findings suggestive of acute toxic/metabolic encephalopathy. The patient was started on I.V. steroids and gradual improvement in the patient's status was noticed. This case emphasizes the possibility of development of toxic encephalopathy in a patient who received ASV and the role of steroids in the treatment of ASV induced toxic encephalopathy. Hence early recognition of ASV induced toxic encephalopathy and its treatment with Steroids can save the life and help in reducing morbidity and mortality.



## CARDIOVASCULAR MANIFESTATION OF HIV AND ITS CORRELATION WITH CLINICAL STAGE OF DISEASE

Dr. Bheemnath, Dr. Laxmikant Desai, Dr. D.P. Singh

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**Introduction:** Human immunodeficiency virus which is the causative agent of AIDS, has infected more than 60 million people since the first clinical evidence of the disease in 1981. The overwhelming majority of people with HIV, some 95% of the global total live in the developing countries (Asia-21.4%, Africa-64.4%).

Cardiovascular manifestations of HIV infection have been observed for more than 15 years and finally prospective data substantiates this association. The cardiovascular abnormalities associated are pericardial effusion, lymphocytic myocarditis, dilated cardiomyopathy, infective endocarditis and malignancy (kaposi's sarcoma and B-cell immunoblastic lymphoma). HAART has significant modified the course of HIV, lengthened survival while is associated with an increase in both peripheral and coronary artery disease.

**Objectives:** 1) To correlate cardiovascular manifestation in HIV infected patients with or without AIDS. 2) To correlate with the clinical stage of the disease.

Material and Methods: The study was conducted in the department of medicine and cardiology, Maharana Bhupal Government Hospital, attached to RNT College, Udaipur (Raj.), India with a total of 50 patients, attending the OPD or those admitted in wards.

**Results:** Out of 50 cases, 31 cases had a normal chest skiagram, 5 had cardiomegaly, 1 had chamber enlargement, 12 had lung abnormality. Out of 50 cases, 21 had sinus tachycardia, 2 had conduction abnormality in the form of RBBB and 5 had low voltage ecgs. Out of 50 cases, echocardiography was abnormal in 20 cases.

**Conclusion:** With these conclusions it can be summarized that cardiac dysfunction are common in HIV infected individuals though mostly asymptomatic. All the manifestations except LV dysfunction are more common in AIDS patients as compared to HIV positive non AIDS patients.



#### UNCOMMON PRESENTATION OF NEUROMYELITIS OPTICA SPECTRUM DISORDERS

Dr. Dave Manan, Dr Vinod Mehta

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Neuromyelitis Optica spectrum disorders are a set of demyelinating disorder that primarily target the optic nerve and spinal cord. Primarily thought to be a subtype of Multiple Sclerosis, now is recognized as a distinct entity. We present a 22yr female patient who was admitted for acute onset upper and lower extremity weakness with progression for one week. MRI showed possibility of ADEM which recovered on giving IV followed by oral steroids and azathioprine. After 6 months after withdrawal of steroids she was again admitted with bilateral proximal lower limb weakness. MRI showed now demyelinating lesions in cervical and lower dorsal segments along with left medulla and periventricular region. CSF was positive for anti-aquaporin 4 antibodies and oligoclonal bands. Patient was started on steroids and mycophenolate mofetil. Patient became better symptomatically on followup. Optic neuritis and acute myelitis remain the core clinical characteristics of NMOSD but are not essential diagnostic criteria. The clinical manifestations are often very similar, but there are important differences in treatment modalities, clinical course and overall prognosis. Hence, it is important to make an early distinction between NMOSD and multiple sclerosis.



## A RARE CASE OF ADENOCARCINOMA OF GASTROESOPHAGEAL (GE) JUNCTION PRESENTING AS A SOFT TISSUE MASS LESION

Dr. Praharsh Pathak, Dr Abhijit Basu, Dr. Ankit Agarwal
Medicine, GMCH, Udaipur

We report a rare case of adenocarcinoma of Gastroesophageal (GE) junction presenting as a soft tissue mass lesion. Adenocarcinoma of GE junction most commonly metastasize to the lungs and liver. Soft tissue metastasis from GE junction primary is very rare (1%) and has been reported in very few cases. Our patient presented with a soft tissue swelling in the thigh, excision of which revealed presence of adenocarcinoma. Immunohistochemistry on the tissue block was suggestive of GI primary. Upper Gastro-Intestinal endoscopy showed growth at the GE junction and the biopsy from the growth was suggestive of adenocarcinoma. The patient was started on palliative chemotherapy (capecitabine plus oxaliplatin) but he succumbed to the disease within one month of starting treatment. We conclude that soft tissue metastasis from a GI primary depicts a worse prognosis and further trials need to be conducted to determine the best treatment for such kind of patients.



## THE CLINICAL STUDY OF ANTI TPO ANTIBODIES IN PATIENTS OF TYPE 1 DIABETES MELLITUS

#### Dr. Rajesh Meena, Dr OP Meena

Medicine, RNT Medical College, Udaipur

**Introduction:** The appearance of Anti TPO antibodies precedes thyroid dysfunction and increase in autoimmune diseases like type 1 diabetes. The occuirrence of thyroid auto antibodies against microsomes (AMA) and thyroglobulin (ATA), frequently seen in Hashimoto's thyroiditis and Grave's disease have been reported in type 1 diabetes mellitus.

**Objectives:** To evaluate the prevalence of Anti thyroperoxidase (TPO) antibodies detercted by highly sensitive radio immunological method in 60 adult type 1 diabetic patients without evidence of clinical thyroid disease.

Materials and Methods: The study was conducted on patients attending the out patient department (OPD) of hospitals attached to RNT medical college and research institute (RNT MC & RI) i.e. MAHARANA BHUPAL GOVERNMENT HOSPITAL. The study was conducted on 60 patients of type 1 diabetes mellitus were selected who gave informed consent and affording to test for anti-TPO antibodies.

INCLUSION CRITERIA- Age more than 12 years and known case of DM1

EXCLUSION CRITERIA- Presence of complication of diabetes, Patients are on lipid lowering agents, Patients are on anti-thyroid drugs.

Results & Conclusion: Anti TPO antibodies level was elevated in 10 (16.66%) patients. Out of 1- patients, 6 (60%) patients were female and 4 (40%) were male. 6 out of 10 (60%) Anti TPO positive patients had longer duration of DM1. Patients having raised Anti TPO antibodies had no relation between Anti TPO antibodies and RBS level. Through HbAlc was high in Anti TPO antibodies positive patients statistically it was not significant. Patients having raised Anti TPO antibodies level had normal TSH level.



### A CASE OF CHRONIC PROGRESSIVE EXTERNAL OPHTHALMOPLEGIA

#### Dr. Rootik Patel

2<sup>nd</sup> year PG resident, General Medicine, GMCH, Udaipur

Chronic Progressive External Ophthalmoplegia (CPEO) is a type of eye disorder characterized by slowly progressive inability to move the eyes and eyebrows. We report a case of 70 year old male presented with complaint of B/L ptosis and dysphagia along with hoarseness of voice. His ACH receptor antibody values are positive hence, Neostigmine and oral Steroid therapy are given. However in view of no therapeutic response to these drugs and later supplementation of significant positive family history of similar complaints in mother and all brothers of the patient indicating maternal pattern of inheritance was suggestive of Mitochondrial Disorder most likely CPEO. Diagnosis was confirmed by muscle biopsy with gomori trichrome which showed ragged red fibres suggestive of mitochondrial myopathy.



#### A STUDY ON PLASMA 25-HYDROXY VITAMIN D LEVELS AS A RISK FACTOR IN PRIMARY HYPERTENSION

#### Dr. Surendra Kumar Gurjar, Dr OP Meena

Medicine, RNT Medical College, Udaipur

**Objectives:** To determine the serum 25-hydroxy vitamin d levels in patients with primary hypertension and its correlation with various parameters.

Materials and Methods: STUDY POPULATION- The study was conducted on patients attending the out patient department (OPD) of hospitals attached to RNT medical college and research institute (RNT MC & RI) i.e. MAHARANA BHUPAL GOVERNMENT HOSPITAL. The study was conducted on 50 hypertensive cases and 50 age and sex matched controls. Informed written consent was obtained from cases and controls for participation in the study and for conduction of investigations.

INCLUSION CRITERIA- Primary hypertension, age 18-65 years.

EXCLUSION CRITERIA- Secondary hypertension, Cerebrovascular disease, Cardiovascular disease, Diabetes mellitus, Dyslipidemia, Chronic kidney disease, Chronic liver disease, Smoker, Anti epileptic drugs, steroids, Rifampicin, ART, cholestvramine, Antacids, Orlistat.

Results & Conclusion: 50 hypertensive cases and 50 non hypertensive controls attending to out-patient department of hospitals attached to RNT medical college and research centre were investigated for evaluation of vitamin D status. Based on the observations made in them the following conclusions were drawn: The hypertensive patients had lower levels of vitamin D with vitamin D status of deficiency in 52% of the cases and insufficiency in 38% of the cases and normal levels in 10% of the cases. Non hypertensive controls showed vitamin D status of normal in 80% of controls and insufficiency in 16% of the controls and deficiency in 4% control. Age of the cases, duration of hypertension, systolic blood pressure and diastolic blood pressure inversely correlated to vitamin D levels. Body mass index, diet of the patient, alcohol consumption, number of anti-hypertensive drugs, drug compliance, and family history of hypertension and fundus status did not correlate to vitamin D levels. Vitamin D is an independent risk factor that is associated with primary or essential hypertension.



#### A STUDY OF CORRELATION OF SERUM PROLACTIN LEVELS TO MELD SCORING SYSTEM IN CIRRHOSIS OF THE LIVER

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Medicine, RNT Medical College, Udaipur

**Objectives:** To study the relationship between serum prolactin levels to MELD scores in cirrhotics and to establish serum prolactin as early marker of complications of cirrhosis of liver.

Materials and methods: Comparative study was done on 100 patients and 100 healthy controls admitted in the hospital. Patients above the age of 15 yrs, diagnosed to have cirrhosis of the liver were included. Patients with other known causes of elevated prolactin levels were excluded from the study.

**Results:** In the study 81% of the patients had raised serum prolactin levels of 33.98±15.43ng/ml which was much higher as compared to the mean levels of the controls14.87±3.65ng/ml. It was also observed that as the MELD score increased, so did the serum prolactin values. It was observed that mean MELD score in cases was 21.27±8.02 ng/ml and the maximum individual value of 39. In our study we observed that as the MELD score increased so did the mean serum prolactin values.

**Conclusion:** In the study in was observed that there was a positive correlation between MELD scores and serum prolactin levels as the marker of severity in cases of cirrhosis of liver.



# CORRELATION BETWEEN DLCO (DIFFUSION CAPACITY OF LUNGS FOR CARBON MONOXIDE) AND MICROANGIOPATHIES IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

Dr. Chandra Prakash Sharma, Dr DP Singh, Dr Hemanth Mahur Medicine, RNT Medical College, Udaipur

**Background:** Diabetes mellitus type 2 is a metabolic disorder that is characterised by hyperglycemia in the context of insulin resistance andrelative lack of insulin. The presence of extensive microvascular circulation and abundant connective tissue in the lungs, raises the possibility that lung tissue may be a target organ in the diabetic patient.

**Objective:** To find out correlation between DLco (Diffusion capacity of lung for carbon monoxide) and microangiopathies in patients with type 2 Diabetes Mellitus.

Material and Methods: The study was done on 84 type 2 DM patients which are further divided into 2 groups. Group A comprises of T2 DM Patients without any microvascular complications and group B comprises of T 2DM patients with at least one microvascular complications.

**Results:** The mean age of the study population was 48.99+-8.070 years. It was also observed that male was disproportionately larger in number (61.90%) as compare to female (38.10%). The mean microalbuminuria of study group was 80.12 and in a group A mean microalbuminuria was 17.62 and in group B 146.62. There is more microalbuminuria in group B and difference among both groups was significant.

**Conclusion:** there is strong correlation between DLco and microangiopathies in patients having type 2 diabetes mellitus.



## ASSOCIATION OF MELD SCORE WITH COLONIC MUCOSAL CHANGES ON COLONOSCOPY IN PATIENTS OF PORTAL HYPERTENSION

Dr. Jainendra Sharma, Dr Gurdeep Kaur, Dr Vipin Mathur Medicine, RNT Medical College, Udaipur

**Background**: The Model for End-Stage Liver Disease (MELD) score is a measure of chronic liver disease severity. Patients awaiting transplantation are assessed using this score. It is calculated by following formula: MELD= 3.78×ln [serum bilirubin (mg/dL)]+11.2×ln[INR] +9.57×ln[serum creatinine (mg/dL)] + 6.43.

**Objectives**: To assess whether the presence of portal hypertension(PHTN) related colonic lesions correlates with MELD scores.

Material and Methods: Study was conducted in the Department of Medicine and Gastroenterology, RNT Medical College, Udaipur .100 cases of PHTN of various etiology undergoing colonoscopy were included. All required blood investigations done. The patients were divided into 4 MELD groups (as per UNOS): Group1: ≤10 Group2: 11-18, Group3: 19-26, Group4: ≥27.

The data was tabulated and analyzed for variation of means and correlation by appropriate biomedical software and p value < 0.05 was considered significant.

**Results**: It was observed that, 14.03% of cases with rectal varices had MELD score > 27. There was statistically significant relation between presence of rectal varices and increasing MELD score (p< 0.001). Also, 20.51% of cases with rectopathy had MELD score > 27. The association between rectopathy and increasing MELD score was also observed statistically significant (p < 0.001). Among the patients with portal hypertension colopathy, 12.50% had MELD score >27. The association between these two was also statistically significant (p < 0.001).

Conclusion: PHTN related colonic lesions are more frequent in patients with higher MELD score.



# CLINICO-LABORATORY PROFILE & RESPONSE TO CURRENT TREATMENT REGIMENS OF MALARIA IN SOUTH EASTERN RAJASTHAN

Dr. Poonam Kumari, Dr Gurdeep Kaur, Dr Sweta Banka Medicine, RNT Medical College, Udaipur

**Introduction:** Malaria continues to be one of the important public health problems in India. Rajasthan is an endemic zone of malaria. This prospective study was conducted to analyze various types of presentation of Malaria in adults, its complications and response to current treatment regimens available.

Materials and Methods: This study is a cross sectional survey. 200 patients who presented with fever and associated symptoms with positive for malaria by slide and/or MPQBC and inclusion criteria were enrolled in the study. These patients were then subjected to treatment regimens with regular vital monitoring and laboratory tests.

Results: *P. falciparum* was the major parasite type causing malaria as 56% cases. The main method to establish diagnosis was microscopy of PBF, however MpQbc helped in diagnosis of cases missed on slide examination and mixed infections. All complications cerebral malaria, respiratory distress, haematological, malaria hepatopathy, acute renal failure and electrolyte disturbances were noted in greater frequency in *P. falciparum*. However even *P. vivax* accounted for complicated cases of malaria in this region. For dysnatremia, hyponatremia was more common than hypernatremia with increase frequency amongst *P.falciparum* cases and higher in cerebral malaria. There was a good response to artesunate and quinine drug with 2<sup>nd</sup> line drugs. However 14 patients in artesunate group were subsequently shifted to quinine based therapy after treatment failure. A total of 4 deaths were reported all *P.falciparum* positive.

Conclusion: An early diagnosis and adequate treatment with antimalarials with timely supportive therapy with haemodialysis and blood component transfusion can save lives in malaria.



## NON-DIPPING PATTERN OF BLOOD PRESSURE RAISES THE TARGET ORGAN DAMAGE RISK IN NON DIABETIC CKD PATIENTS

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**Background:** A non-dipper blood pressure pattern is very common in chronic kidney disease (CKD) patients and affects the progression and development of target organ damage or renal and cardiovascular damage in CKD patients.

**Objectives:**. To evaluate the increased risk of renal death and cardiovascular events with the increment in daytime and night time Systolic and Diastolic blood pressure. 2. Prognostic role of ambulatory blood pressure monitoring in non diabetic CKD patients.

Methods: A total of 160 hypertensive non diabetic patients were enrolled, out of them 80 patients were CKD (cases) and 80 were non CKD (controls). Ambulatory blood pressure monitoring (ABPM), clinic BP, eGFR, 2D Echocardiographic (%LVEF), and other clinical data were collected for 1 year duration. Statistical analysis was done by using unpaired t-test for independent variables to ascertain the relationship between non-dipping pattern of BP and clinical parameters.

Results: A total of 60% of cases and 35% of controls were non-dippers, while remaining were have dipper BP pattern. Patients with non-dipping BP pattern had the worst renal function and severe cardiovascular damages among these CKD patients (P <0.05). The eGFR (estimated glomerular filtration rate) and %LVEF shown significant relationship with the rate of decline in nocturnal BP. Non-dipper BP pattern was an independent factor affecting renal damage and left ventricular ejection fraction in non diabetic CKD patients.

**Conclusion:** 24-hr ABPM is superior to clinic BP monitoring for determining prognosis in CKD patients. The non-dipper BP pattern is closely related to increased risk of renal and cardiovascular damage in non diabetic CKD patients, and special attention should be given to these CKD patients.



### MYOCARDITIS AS AN ATYPICAL MANIFESTATION IN A YOUNG PATIENT OF DENGUE FEVER

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Dengue is an arbovirus which is transmitted by Aedes aegypti mosquito commonly found in tropical and subtropical regions of the world. It presents with fever, rash, retro orbital pain, myalgia. It may complicate into severe forms like Dengue Haemorrhagic fever and Dengue shock syndrome characterized by hypotension, haemoconcentration, thrombocytopenia and bleeding tendency. Atypical manifestations may involve multiple systems like cardiac, hepatic, renal, and central nervous system. A 22-year old male with dengue infection presented with complains of fever with chills and rigor, rash all over body, vomiting and bodyache for last 4 days. His platelet count was 8000 per cumm on admission so he was transfused 4 units of platelet concentrate (random donor platelet). Patient suddenly developed tachyarrhythmia (ventricular tachycardia) and hypotension followed by ST segment elevation in precordial leads with elevated cardiac enzymes, global hypokinesia on ECHO and left ventricular ejection fraction was 25%. Patient was given supportive management like intravenous fluids and vasopressors and he became hemodynamically stable and electrocardiogram changes reverted to normal on 3rd day. This case emphasizes the possibility of dengue virus induced reversible myocardial damage as a confounding pathology. Hence, Early recognition of hypotension due to myocarditis induced by dengue fever with timely management can save the life and help in reducing morbidity and mortality.



# THE STUDY OF RELATIONSHIP BETWEEN SERUM FERRITIN, GLYCATED HEMOGLOBIN AND RISK FACTORS OF TYPE 2 DIABETES MELLITUS

Dr Deepa Katara, Dr Bhartibhushan Yadav, Dr OP Meena

 ${\it Medicine, RNT Medical College, Udaipur}$ 

**Introduction:** Diabetes Mellitus refer to a group of common metabolic disorders that share the phenotype of hyperglycemia. Several distinct type of DM are caused by complex interaction of genetics and environmental factors. Ferritin serve to store iron in a non toxic form, to deposit in a safe form and to transport it to area where it is required. The aim of present study is to find out the relationship between serum ferritin with type 2DM and association of serum ferritin with HbA1c and risk factors associated with DM and its complication.

**Methodology:** The study was conducted on 136 patients who attended OPD or were admitted in wards of MBGH attached to R.N.T. Medical College. They were subjected to history taking routine laboratory tests, estimation of HbA1c, lipid profile and fundoscopy.

**Results:** Higher levels of mean serum ferritin (318.51ng/ml) in patients having HbA1c >6.5% and lowest level of mean serum ferritin (260.16ng/ml) in patients who had HbA1c <5.6% alongwith higher level of mean serum ferritin level with risk factors associated with DM.

**Conclusion**: Elevated serum ferritin concentration were associated with increased incidence of type 2 DM especially in presence of other risk factors.



# THE STUDY OF HS-CRP AND COMPLEMENT C3 LEVEL AND AS MARKER OF CLINICAL SEVERITY AND OUTCOME IN COMPLICATED AND UNCOMPLICATED PLASMODIUM FALCIPARUM MALARIA

#### Dr. Harish, Dr OP Meena

Medicine, RNT Medical Collage, Udaipur

**Introduction**: The measurement of hs-CRP and C3 Complement level can be useful and understanding the pathogenesis of server malaria. Studied involving measurement of hs-CRP and C3 level in malaria penitent can be asses the severity of disease.

**Methodology:** 100 patients of plasmodium, falciparum presented with different clinical manifestation in MBGH Hospital Udaipur. Serum hs-CRP and C3 complement level was done along with routine test. All these patients was 54.35 years while male to female ratio for uncomplicated and complicated and healthy controls. 2.1:1, 1.2:1 and 1.5:1.

**Results:** In this study we found that hs-CRP and C3 Compliment level Significant correlate the severity and outcome and duration of hospital stay in P. Falciparum infected patients.

**Conclusions**: In this prospected case study we found that hs-CRP and C3 Compliment level presentation Correlate significant with morbidity and mortality in plasmodium falciparum thus and hs-CRP C3 compliment level can be considered cost effective tools in assessment prognosis of plasmodium falciparum.



# A STUDY OF LABORATORY AND CLINICAL PROFILE OF FEVER WITH THROMBOCYTOPENIA IN SOUTHERN RAJASTHAN

#### Dr. Jitendra Kr. Patel

Resident, Medicine, RNT Medical College, Udaipur

**Objectives:** 1) To evaluate clinical profile of fever with thrombocytopenia. 2) To identify the cause of fever with thrombocytopenia. 3) To assess the clinical complications and prognosis of the fever with thrombocytopenia.

Material and methods: This study was conducted on patients admitted in Maharana Bhupal Government Hospital Udaipur during the period from May 2017 to December 2017. We prospectively collected a series of 100 patients of fever with thrombocytopenia. Simple random sampling done. All patients of age more than 18 years presented with fever with thrombocytopenia included. Patients with inherited or autoimmune causes of thrombocytopenia, patients on drugs causing thrombocytopenia, patients with HIV infection and patients with cirrhosis of liver were excluded from the study.

Results: In our study infection (100%) was the established diagnosis as compared to other study in which along with infection (68%), hematological condition (15%), was also documented. This may be due to seasonal and regional variations. Among infection malaria (58%)was the commonest while enteric fever (16%) was second common cause. Dengue and VHF infection constituted 14% in our study. Thrombocytopenic signs were presented in 28%. Petechiae and purpura(75%) were commonest bleeding manifestation followed by spontaneous bleeding(25%). Due to rapid improvement in clinical condition of patients and short stay and discharge only 30% of patients were followed up for trends of platelet counts which showed increasing trends in platelet count both at time of discharge and follow. There was continuously falling trends in 8% in our study, who expired.

**Conclusion:** Fever with Thrombocytopenia consists of occult presentation of common diseases rather than rare disease.



# HOSPITAL BASED STUDY OF VECTOR BORN DISEASE IN POST RAINY SEASON IN ADMIT PATIENTS AT TERTIARY CARE HOSPITAL

Dr. Satish Kumar, Neera Samar, Rattilal Meena, Mayank Sharma Medicine, R.N.T. Medical College Udaipur, Rajasthan

**Background:** Vector Borne Diseases (VBDs) are among the most complex of all infectious disease to predict, prevent or control. Every year there are more than one billion cases and over one million deaths from VBDs globally. The clinical signs and symptoms of most of these infections are very similar and the correct diagnosis is only possible by using pathogen specific diagnostic tests.

**Objectives**: To study the incidence and outcome of malaria, dengue fever, scrub typhus and chikungunya in post rainy season in admitted patients.

**Methodology**: This study was undertaken in M.B.G. Hospital attached to R.N.T. Medical College, Udaipur. 100 patients were enrolled in study after applying inclusion and exclusion criteria. All the patients were evaluated in detail regarding presentation and outcome.

Results and Conclusion: In our study commonest cause of VBDs in post rainy season in admitted patient was acute undifferentiated fever 39% followed by scrub typhus 38%, malaria 18%, and dengue 5%. Majority of patients had hematological (90%), followed by Liver (71%), Renal (35%), CVS (30%), CNS (24%) and respiratory system involvement (24%). Out of total 100 patients 78% patients survived and number of death were 22%. Scrub typhus was the commonest cause of mortality (34.21%), followed by acute undifferentiated fever (17.94%) and malaria (11.1%). Respiratory system dysfunction (ARDS) was associated with highest mortality 75%. CNS dysfunction was second commonest cause of mortality 50%.



#### A RARE CASE OF BILATERAL PLEURAL EFFUSION

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Respiratory Medicine, GMCH, Udaipur

Chylothorax type of pleural effusion in which chyle accumulates in pleural space. It is most common form of pleural effusion in early childhood. In adulthood it is rare and commonest cause is traumatic. We report a case of 25 year old male who presented with complain of left sided chest pain, shortness of breath since four months. Patient was taking anti tubercular treatment from last four months but not improving clinically. We clinically assessed the patient and chest X ray was advised which shows bilateral pleural effusion. Pleural fluid aspirated bilaterally. Pleural fluid examination was in favour of chylothorax. Till now in literature bilateral chylothorax cases rarely been reported in adulthood.

**Conclusion:** Mycobacterium tuberculosis with bilateral pleural effusion should be investigated for possibility of chylotyhorax.



## A STUDY ON SERUM URIC ACID LEVELS AS PROGNOSTIC INDICATOR IN ACUTE MYOCARDIAL INFARCTION

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**Background:** Acute myocardial infarction is one of the leading causes of mortality and morbidity globally. Certain markers like Uric acidindicate unfavorable prognosis in IHD, higher blood pressure and an overall adverse CVD risk profile.

**Objectives:** To evaluate correlation between elevated serum uric acid levels and prognosis of patients with AMI.

Methodology: Base on diagnostic criteria, 100 confirm patients of AMI who admitted in JMC, Jhalawar were enrolled in study. A written consent was taken from all participants. Information was collected and workup of the cases was done as per standard proforma. Relevant clinical workup including detailed history, general and physical examination, serial ECGs, relevant laboratory investigations and appropriate treatment were carried out in these patients. Patient's serum uric acid level was measured on day 0, 3 and 7 of MI.

Results: Majority (37%) of the patients were in the age group of 51-60 years. AMI was more common in males (70%) and patients who had BMI ≥30 (45%). On day 0, mean uric acid level in patients belong to Killip class I, II ,III and IV was 4.4, 7.01,8.29and 9.87 mg/dlrespectively. Mean serum uric acid levels on day 7 in patients with Killip class I is 4.67 and those with Killip class II is 6.62 mg/dl. This difference is statistically significant with p value<0.001. Total six patients expired during hospital stay and all 6 belonged to higher Killip class with serum uric acid levels in the highest quartile.

Conclusion: Hyperuricemia is an indicator of poor prognosis in acute MI.



#### STUDY OF OBESITY AS AN INDEPENDENT RISK FACTOR FOR DIASTOLIC DYSFUNCTION IN A TERTIARY CARE HOSPITAL IN SOUTHERN DISTRICT OF RAJASTHAN

Dr. Ranjna Veerwal, Dr Gurdeep Kaur, Dr Shashibhushan Sharma Medicine, RNT Medical College, Udaipur

Introduction: Obesity has reached epidemic proportion in India in the 21st century, with morbid affecting 5% of the country's population. Left ventricular hypertrophy and diastolic dysfunction are common in obese. In obese person even without hypertension, diastolic dysfunctions are seen. These changes in left ventricle are related to sudden death in obese person. So this study was planned to assess the diastolic dysfunction in obese in southern district of Rajasthan.

**Objectives:** 1.) To study obesity as an independent risk factor for diastolic dysfunction. 2.) To determine direct effect of grades of obesity on echo-cardiographic indices of left ventricular diastolic function.

Material and methods: A case control study was conducted in medicine ward and outpatient department of Maharana Bhupal Government Hospital attached to R.N.T. Medical college, Udaipur from April 2012 to December 2013. A total 30 obese person (non-diabetic and Nonhypertensive) were included as cases and 30 non-obese (non-diabetic and Non-hypertensive) were included as controls. A pretested, semi-structured performa was used to collect the data with considering inclusion and exclusion criteria.

Results: Mean age of cases and controls were 38.60±8.8 years and 38.73±8.3 years respectively. Cases had significantly higher diastolic BP with mean of 76.33±4.23 mm of Hg as compared to mean of 72.93±6.05 mm of Hg in controls. Cases had significantly elevation in maximum velocity of active mitral filling and ratio of passive and active atrial filling was reduced significantly, suggest impaired diastolic dysfunction. As severity of obesity increased in terms of BMI, severity of diastolic dysfunction also increased.

**Conclusion:** Presence of obesity associated with diastolic dysfunction and severity of obesity also correlated with severity of diastolic dysfunction.



#### MARFAN SYNDROME: A CASE REPORT

Dr. Dhaval Nayak, Dr Devendra Sareen, Dr Dileep Goyal

Pediatrics, GMCH, Udaipur

Background: Marfan syndrome is an autosomal dominant, multisystem connective tissue disease, associated with a mutation in fibrillin, and occasionally a mutation in TGFBR 1 or 2. The cardinal manifestations of this condition involve the cardiovascular, ocular and skeletal systems. Cardiovascular pathology, including aortic root dilatation, and aortic dissection, is the leading cause of death in MFS patients. Characteristic clinical features include anterior chest deformities, long fingers, tall stature, lens dislocation and myopia. Medical management may not reverse the features seen, but can reduce the progression and the severity of the symptoms. Diagnosis is mainly done by detailed clinical examination. Serum methionine must be carried out to rule out homocystinuria.

**Objective**: To describe the features and complications of Marfan syndrome and discuss the current management.

Methods: Detailed history, physical examination and laboratory investigations.

Conclusion: This report underscores the importance of detailed family history and physical examination in the diagnosis of Marfan syndrome. Additionally, good insight about the pathogenesis and the clinical presentation of Marfan syndrome improves the effectiveness of medical therapies. Regular valvular monitoring and early initiation of beta blockers therapy as well as elective prophylactic surgical repair contribute to increasing the survival rate of Marfan patients.



#### BRUCELLA MILITENSIS: A CASE REPORT

Dr. Shiwani Mangla, Dr Hemant Jain, Dr Sanjay Mandot, Dr Devendra Sareen

Pediatrics, GMCH, Udaipur

**Introduction:** Brucellosis is a systemic illness caused by BRUCELLA. Humans are accidental hosts and acquire the zoonotic disease from direct contact with an infected animal or consumption of product of an infected animal. Brucellosis is associated with immune thrombocytopenia.

Case report: A 14 month male child presented with fever, epistaxis and petechiaes all over body. Patient had H/0 recurrent fever for last 3 months. On examination, child was active with purpura and ecchymosis all over body and spleen was palpable. On evaluation platelet counts were 14000 only. Other cell lines were normal. PBF, bone marrow, ANA, dengue serology and MP test were normal/inconclusive. A provisional diagnosis of ITP was made; meanwhile blood C/S reported BUCELLA MELITENSIS. There was H/O consumption of unpasteurized milk. Patient is discharged on TMP-SMZ and Rifampicin with improved counts. Blood C/S and serum agglutination test for Brucella should be considered in patients presenting with fever and thrombocytopenia/ITP.



#### LINERA TRICHOEPITHELIOMA: A RARE PRESENTATION

#### Dr. Nitin Verma

Resident, Skin & VD, RNT Medical College, Udaipur

A 20 year old female presented with 3 years history of asymptomatic, gradually progressive 2-3mm sized, skin coloured, flat topped, shiny papules in a linear configuration over left side of face. Histopathology showed evidence oftrichoepithelioma. Trichoepithelioma (TE) is a benign tumour of follicular germinative cell. Lesions develop as firm, non-ulcerated, skin-colored papules with a propensity for the face and rarely exceed 0.5 cm in size. Rarely, multiple trichoepitheliomas may be arranged in the form of linear plaques in a dermatomal distribution; very few such cases have been reported. We report this case of trichoepithlioma on account of its rare linear arrangement.



#### INTERLOBAR EFFUSION PRESENTING AS MASS LIKE OPACITY ON CHEST X-RAY

Dr. Shubham Jain, Dr S K Luhadia, Dr Atul Luhadia Respiratory Medicine, GMCH, Udaipur

Phantom tumour / Vanishing tumour defined as localised transudative interlobular fluid collection commonly due to congestive heart failure. Mostly it is accompanied by features of cardiac origin. Most commonly found in the minor fissure but can also occur rarely on oblique fissure. lateral chest X ray chest helps in diagnosing Phantom tumour. We are presenting a case of 41 year old male presented with complain of dry cough, left sided chest pain, low grade fever since 15 days, his CXR PA view revealed mass like opacity in left upper zone while lateral view radiograph showed spindle shaped opacity due to pleural effusion in oblique fissure of left lung, his CECT finding was opacity in left upper zone suggestive of interlobar effusion /mass. After thorough cardiology consultation and investigation it was found to be non-cardiogenic in origin, so it was decided to aspirate under CT guidance, which turned out to be tubercular and was exudative contrary to the traditional belief, which makes it a unique case and up to the best of my knowledge no such case has been reported till now. Therefore tuberculosis also should be kept in mind while evaluating such kind of cases.

**Conclusion:** Interlobar effusion with non-cardiogenic origin should be investigated for possibility of tubercular origin.



# AN INTERVENTIONAL STUDY TO ASSESS OUT THE EFFECT OF YOGA ON CLINICAL, BIOCHEMICAL AND HEMATOLOGICAL PARAMETERS IN PATIENTS OF RHEUMATOID ARTHRITIS

#### Dr. Gopal MS Dhaka, Dr Meenakshi Sharma

Physiology, SMS Medical College, Jaipur

**Background:** Rheumatoid arthritis (RA) is a chronic systemic inflammatory autoimmune disease of unknown etiology, with its primary manifestation in the synovium. Yoga has been found to be an effective method in reducing the morbidity in Rheumatoid arthritis patients.

**Objectives:** The present study was aimed at assessing and comparing clinical, biochemical and hematological parameters of rheumatoid arthritis before and after intervention (Yoga) in rheumatoid arthritis patients and to assess and compare these parameters between study (with intervention) and control group.

Materials and Methods: After obtaining desired clearance from the institutional ethics committee and research review board, a total of 65 subjects of Rheumatoid Arthritis for the Yoga group and non-Yoga group each were selected from Rheumatoid Arthritis patients attending Rheumatoid clinic of S.M.S. Hospital Jaipur (Raj). Pain intensity, inflammation, stiffness, pulse rate(PR), blood pressure (BP), lymphocyte count (LC), C-reactive protein (CRP), Rheumatoid factor(RF), Hand grip strength and serum uric acid (UA) measured at 0 & 8 weeks.

**Result and Conclusion:** This is an ongoing study; hence the actual results will be presented at the time of conference. The current trend of our study shows improvement in clinical, biochemical and haematological parameters among Yoga group as compared to non-Yoga group.



#### DUANE'S RETRACTION SYNDROME: A CASE REPORT

#### Dr Madhuri Alwani

Resident, Medicine, GMCH, Udaipur

This presentation deals with a 60 year old man with Duane's retraction syndrome which is characterised by congenital deficiency of abduction which retraction of eye ball on adduction. This patient presented to male medicine ward of Geetanjali Medical College and hospital with the chief complaint of right hemicranias associated with vomiting, diplopia on looking to the left for last 30 years which was intermittent and tilting of head to left side. There is no history of any contributory illness in early childhood. His development was normal, he was normotensive and there were no other congenital anomalies. On examination, the palpebral apertures were normal and equal on both sides on straight looking. On attempting to carry out adduction of left eye, there was no outward movement, but left palpebral aperture became wider with normal movement of right eye and diplopia (homonymous uncrossed) consistent with left lateral rectus paralysis palpebral aperture became narrow with retraction of left eye and normal movement of right eye. On convergence, left eye failed to converge adequately and no upward or downward movement of eyes were noted during the act. Forced duction test revealed limited lateral movement of left eye with full range of medial movement.



# CASE REPORT: SMALL CEREBRAL CORTICAL INFARCTION PRESENTING AS UNILATERAL CLAW HAND MIMICKING ULNAR NERVE PALSY

#### Sonika Choudhary

Resident, General Medicine, GMCH, Udaipur

**Introduction:** Vascular infarcts in the central hand knob area can imitate peripheral motor nerve deficits. Isolated hand weakness in cerebral cortical infarction is a rare entity and has been documented to be less than 1% of all ischemic strokes.

Case: Small cerebral cortical infarction can present with isolated hand weakness mimicking peripheral nerve palsy. Here reported is 35-year lady who presented with sudden onset of isolated claw hand deformity recovered completely with antiplatelet therapy.

**Conclusion:** It is important to consider small cortical infarcts of hand knob region in patients with sudden onset of claw hand deformity. Hence central nervous system should be evaluated for stroke or even other pathology as the causation of isolated hand weakness without sensory deficit.



## A CASE OF ACUTE POST PARTUM COMPLETE THIRD DEGREE UTERINE INVERSION

#### Dr. Roma Dalal

Resident, Obstetrics & Gynaecology, GMERS Medical College, Sola, Gujarat

Acute postpartum uterine inversion is an uncommon and extremely serious complication of delivery. Diagnosis is usually based on clinical signs and symptoms. Prompt diagnosis and immediate uterine reversion are crucial steps of management of this severe complication. It is based on a medical reanimation associated with firstly a manual reduction then surgical treatment using various techniques. We report the case of 25 year old multipara with acute puerperal uterine inversion of second degree who delivered at peripheral centre and referred to our set up.



#### EVALUATING POST-OPERATIVE OUTCOMES OF SUTURELESS AND GLUE-FREE PTERYGIUM SURGERY

#### Dr Appurv Kachhwaha

Resident, Ophthalmology, GMCH, Udaipur

**Objective:** To assess the results of sutureless and glue-free blood clot fixation of conjunctival autograft after primary pterygium excision.

**Methodology:** A total of 85 eyes of 82 patients were operated. All eyes underwent primary terygium excision followed by conjunctival autografting. The recipient bed was encouraged to achieve natural haemostasis and blood clot was used as tissue adhesive to secure conjunctival autograft. Graft adherence and positioning was examined after 15 min.

**Results:** After surgery, out of total 85 eyes (n), graft edema developed in 43 eyes (50.6%), graft loss in 2 eye (2.4%), granuloma formation in 1 eye (1.17%), sub graft hematoma in 5 eyes (5.9%) and avascular patch in 1 eye(1.17%).

**Conclusions:** Sutureless and glue-free pterygium excision with autologous conjunctival autograft is a simple and safe surgery. It provides excellent cosmesis and reasonable patient satisfaction.



## OCULAR MANIFESTATIONS OF ETHAMBUTOL TOXICITY IN PATIENTS OF TUBERCULOSIS

#### Dr Komal Bhutna

Resident, Ophthalmology, GMCH, Udaipur

**Objective**: To assess the correlation between Ethambutol dosage (per kg body weight) and prevalence of ocular manifestations.

Methodology: It was a retrospective study and all patients on Antitubercular treatment referred from Department of Respiratory Medicine were included. Visual acuity, best corrected visual acuity (BCVA) were determined by Snellen's chart and colour vision was assessed using an Ishihara's chart and Red comparison test. Slit lamp examination was done to examine anterior and posterior segment. Dilated fundus examination was done by using indirect ophthalmoscope. Fundus photography and Perimetry 30-2 were done of all patients to keep a record.

Results: Out of 22 patients (44 eyes) examined, 6 patients (11 eyes; 25%) had signs suggestive of ethambutol toxicity. Of them 3 patients (6 eyes) had Red-Green colour deficiencies, 3 patients (6 eyes) had optic disc oedema and 3 patients (5 eyes) had visual field defects. On follow up of 1 of the patient after 1 month of stoppage of drug it was found that visual field pattern improved. All affected patients were on ethambutol dose of more than 15 mg per kg of body weight and at least for 2 months

Conclusion: The study underlines the importance of ocular examination prior to and during ethambutol therapy. Regular follow up is essential for evaluating ethambutol related ocular toxicity.



#### A CASE OF CONJUNCTIVAL MELANOMA

#### Dr Mitsu Vora

Resident, Ophthalmology, Smt. NHL Municipal Medical College, Ahmedabad

Objective: to study a rare case of conjunctival melanoma its treatment and outcome

Case description: Malignant melanoma is a rare tumour of middle age and old age. Its clinical presentation varies and making a clinical diagnosis may be difficult. The tumour is potentially fatal and displays a high rate of recurrence which may be attributed to delay in diagnosis and inadequate surgical approach. We report a case of conjunctival melanoma in a 53 year old maleon the temporal side of Conjunctiva approaching the limbus around 8×3 mm in size and fleshy in appearance. On the basis of typical site and appearance it was decided to operate the patient and mass was excised and amniotic membrane graft was placed. The excised mass was sent for his topathology to confirm the clinical diagnosis. The biopsy finding showed a malignant melanoma.

**Discussion:** The patient was symptomatically better post operatively with amniotic membrane graft in place.



## CLINICAL PROFILE OF PATIENTS PRESENTING WITH OCULAR TRAUMA TO A TERTIARY CARE HOSPITAL

#### Dr Nishant Patel

Resident, Ophthalmology, GMCH, Udaipur

**Objective:** To study the severity and types of ocular trauma presenting at a tertiary care hospital.

**Methodology**: It is a cross-sectional study done over 1 month (August 2018). Patients coming to eye OPD or emergency department with history of ocular trauma were examined. Torch light examination, bedside visual acuity and fundus examination were done. CT scan and USG B-scan were done wherever required.

**Results**: Out of 39 patients examined, 34 were males and 5 were females. Of them, 36 (92.3%) patients had uniocular closed globe injuries and 3 (7.7%) patients had uniocular open globe injuries. Most common cause was RTA in 23 (58.9%) patients and 8 (20.5%) cases reported work-place related trauma.

Conclusion: Road Traffic Accident (RTA) is a major cause of ocular trauma. They can cause severe ocular trauma and may also cause permanent loss of vision. Ocular trauma can be prevented by taking simple precautions like wearing helmet during driving and wearing protection glasses in high-risk professions like welding workers, carpenters, metal and stone cutters.



### A RARE CASE OF CAROTICO-CAVERNOUS FISTULA PRESENTED WITH RUPTURED GLOBE AFTER TRAUMA

#### Dr Utkarsh Deshmukh

Resident, Ophthalmology, Geetanjali Medical College and Hospital, Udaipur

**Background:** Carotid-cavernous fistula is an abnormal communication between the carotid artery and the cavernous sinus at the base of the skull.

Case description: A 5 years old child presented to casualty with herniation of right ocular contents and active bleeding after fall from bed while playing. He had past history of pulsatile proptosis and diminution of vision in same eye since 2 weeks. MRI brain and orbit was done 1 week before presentation.

Conclusion: MRI shows multiloculated lesion involving the extraconal aspect of the right orbit measuring approximately 36(AP)\*24(TR)\*20(SI)mm compressing the superior, medial and lateral extraocular muscles, optic nerve and the globe with anterior displacement. There appears communication of lesion with branches of external carotid artery and tributaries of cavernous sinus s/o carotico-cavernous fistula (CCF) with areas of hematoma/arteriovenous malformation.

**Discussion:** Carotico-cavernous fistula with unknown origin is a rare entity though early diagnosis and treatment can help prevent visual loss.



# A STUDY ON KNOWLEDGE AND ATTITUDE ABOUT ORGAN DONATION AMONG MEDICAL STUDENTS IN J.L.N. MEDICAL COLLEGE, AJMER

#### Dr. Arshiya Bharti

Resident, Community Medicine, J.L.N. Medical College, Ajmer

**Introduction:** Demand for organ donation continues to vastly surpass the inadequate supply capacity all over the world. Health care providers play a critical role in educating and motivating the public to pledge their organs for donation. The objective of this study is to assess the knowledge and attitude regarding organ donation among first year medical students.

**Methodology**: A cross sectional study was conducted among 141 first year Medical students. Sample size was selected by convenient sampling and data was collected by self-administered questionnaire.

**Results:** Analysis of the results showed that out of 141 students, 48.9% and 51.06% were females & males respectively. Majority (51%) were 18-19 years old. Most common source of information was found to be internet (75.8%). Only 31.91% students knew the definition of organ donation, 63 (44.7%) and 77 (54.6%) students had the knowledge about what organs could be donated and who could be an organ donor respectively. Majority (71.6%) were willing for organ donation.

**Conclusion:** There is limitation in knowledge among undergraduate medical students regarding organ donation but have positive attitudes towards organ donation. By giving right knowledge and orientation medicos can become future organ donors who can motivate the community to donate organs.



## TOBACCO USE AND ITS HAZARDS: A CROSS SECTIONAL STUDY AMONG SCHOOL ADOLESCENTS

Dr Hemant Kumar Bindal<sup>1</sup>, Dr Manish Jain<sup>2</sup>, Dr Madhusudan Swarnkar<sup>3</sup>, Dr Mayank Jain<sup>2</sup>, Dr Vinod Kumar<sup>2</sup>, Dr Asif Ahmad Qurishi<sup>4</sup>

1. Resident, 2. Assistant Professor, 3. Professor, 4. Senior Demonstrator, Dept of Community Medicine, Jhalawar Medical College, Jhalawar

**Background:** The tobacco epidemic is one of the biggest public health threats the world has ever faced, killing more than 7 million people a year. Most people who use tobacco started during adolescence, and those who begin at a younger age are more likely to develop nicotine dependence and have trouble quitting.

**Objectives:** To determine the prevalence and pattern of tobacco use among school adolescents and to assess their knowledge regarding health hazards due to tobacco.

**Methodology:** A cross sectional study has been carried out from June 2018 to September 2018 among 11<sup>th</sup> and 12<sup>th</sup> standard Students of two government Schools in field practices areas of Jhalawar Medical College, Jhalawar. A semi structured questionnaire pertaining information regarding age, sex, use of tobacco, knowledge of hazards etc was used for data collection.

**Results:** Out of the total 183 students, 27 (14.75%) students were consuming tobacco products. Among tobacco users, most common form of tobacco use was tobacco based tooth powder (48.18%) followed by gutka (33.33%) and smoking (14.8%). Most common reported reasons for tobacco use were influenced by family members (44.44%) and peer pressure (37.03%). Out of 183 students, 177 (96.72%) students were aware about tobacco health hazards. 78.14% students received motivation in past about avoiding tobacco products in life.

**Conclusion:** it is an alarming sign that even after enthusiastic efforts to stop tobacco use, a significant proportion of school adolescents was consuming tobacco in various forms. Awareness programme must be implemented adequately in school health.



#### PATTERN OF SMART PHONE AND INTERNET USAGE AMONG PROFESSIONAL STUDENTS IN JHALAWAR – A CROSS SECTIONAL STUDY

Dr. Ravi Khichar<sup>1</sup>, Dr. Pankaj Gupta<sup>2</sup>

1. Resident 2. Professor, Community Medicine, Jhalawar Medical College, Jhalawar

**Background:** The number of mobile internet users in India has reached 371 million by June 2016. Mobile phone usage has both pros and cons. However, problematic internet use by youth is reported with increasing addictive behavior and mental health implications.

**Objective:** To determine the pattern of smart phone and internet usage and level of addiction among professional students.

**Methodology:** A Cross-sectional analytic study was conducted on 408 medical students of Jhalawar Medical College. The data was collected by self-administered questionnaire having two parts. First part recorded demographic information and second part consist Young's scale of Internet Addiction which was a likert based scale consist 20 items that measures mild, moderate, and severe level of Internet Addiction.

Results: Of the 408 students, there were 224 (54.9%) males and 184 (45.1%) females with mean age of 20.27 (±1.8) years. Most common causes of internet use were assessing of social sites (401, 98.28%), movies, music (359, 87.99%) and search of academic related material (212, 51.96%) on internet. The mean time spent on internet was 2.52 (±1.20) hours per day. Boys spend more time on Internet than girls (p<0.05). Most of students (244, 59.8%) found that internet use affect their academic activities. According to YIAT score, 223 (54.66%) were normal users, 142 (34.8%) having mild internet addiction, 36 (8.83%) moderate internet addiction and 07 (1.71%) having severe Internet addiction.

**Conclusion:** 45.34% medical students were found certain degree of internet addiction. Most commonly internet was used for assessing social sites.



# EFFICACY OF 0.2% ROPIVACAINE IN SURGEON ASSISTED TRANSVERSE ABDOMINIS PLANE BLOCK FOR POST OPERATIVE ANALGESIA AFTER CAESAREAN DELIVERY (PERFORMED UNDER SPINAL ANAESTHESIA)

#### Dr Anjuri Goyal

Resident, Anaesthesia RNT Medical College, Udaipur

Background and Aims: TAP is a neurovascular plane located between the internal oblique and transverse abdominis muscles and nerves supplying abdominal wall pass through this plane before supplying anterior abdominal wall. To compare efficacy of 0.20% Ropivacaine and 0.9% NS in surgeon assisted transverse abdominis plane block for post operative analgesia after caesarean delivery performed under spinal anaesthesia regarding quality of analgesia ,duration of requirement first rescue analgesia, total dose consumption of rescue analgesic.

**Method-** After exploration of anterior abdominal wall, surgeon assisted in TAP block and guided us for not entering peritoneal cavity. In the triangle of petit, infiltrate 20 ml Ropivacaine 0.2% (group R) for each side or receive 20 ml with normal saline 0.9% (group C) for each side bilaterally at the end of caesarean section between internal oblique and transverse abdominis muscles.

#### Result- In our study

- 1. Dose of rescue analysesic is reduced in group R (mean 248 mg) comparing to group C (mean 433mg).
- 2. Duration of requirement first rescue analgesia is longer in group R (mean 8.04 hr) comparing to group C (mean 4.08).

**Conclusion-** Ropivacaine 0.2% use in TAP block decrease dose requirement of rescue analgesia and increase duration for requirement of first dose of rescue analgesia.



#### CAPNOGRAPHY LIMITATIONS: CASE REPORT

#### Dr Jyoti Gaekwad

Resident, Anaesthesia, RNT Medical College, Udaipur

**Introduction:** Capnography tracing is one of the confirmatory sign of endotracheal tube placement. However, Capnography does have its limitations including false positive or ambiguous results

Case description: A 31yr old woman, posted for excision of a large swelling in the oral cavity extending uptosubhyoid region, Mallampatti grades could not assessed since swelling lifting tongue towards hard palatepalat. In CT scan little space was visualized in posterior pharynx. Operation theatre prepared for predicated difficult intubation and ENT surgeons on standby for emergency tracheostomy. Patient was induced and blind nasal intubation with portex North pole ET tube, on auscultation, air entry reduced bilaterally. However, continuous presence of capnography tracings suggested correct endotracheal tube plac. while doing oropharyngeal packing the tube was not in trachea instead curved 'U' shape inoropharynx. So patient extubated and tried reintubation but couldn't intubate and started desaturating, later can't ventilate and can't intubate situationarised, so tracheostomy done.

**Discussion:** In our case capnography tracings were continuously present on monitor. May be due to closed space created by huge swelling which pushes the tongue towards hard palate. Leakage detected only when oral cavity opened to place pharyngeal pack which displaced the tongue from hard palate. As we were able to ventilate the patient with some resistance and no air leak from oral and nasal cavity that can be a probability of continuous Capnograph on monitor.

**Conclusion:** Although capnography is a good tool to judge correct endotracheal tube placement in trachea but it cannot be a sole method to identify it, as we faced in our case.



# MANAGEMENT OF PERFORATION AFTER ENDOSCOPIC RETROGRADECHOLANGIOPANCREATOGRAPHY: A CASE REPORT

#### Dr. Arpit Joshi

Resident, General Surgery, Geetanjali Medical College and Hospital, Udaipur

**Background:** Introgenic perforation of the gastrointestinal tract related to diagnostic or therapeutic endoscopy is a rare but severe adverse event, associated with significant morbidity and mortality. The present study is an experience with conservative management and its outcome of Endoscopic Cholangiopancreatography (ERCP)-related perforations.

Case description: A 50 year old female presented to Geetanjali medical college and hospitaland was admitted with a tentative plan of laparoscopic cholecystectomy. She was evaluated and an Ultrasound Abdomen was suggestive of Common Bile duct(CBD) dilatation. A Magnetic Resonance Cholangiopancreatography (MRCP) was done confirming dilatation of the biliary tree with lower end CBD stoned. She under went sphincterotomy, clearance of CBD stone and biliary plastic stent placement. Post procedure she developed abdominal pain, distension and vomiting and X-ray Abdomen and a Contrast Enhanced CT scan of Abdomen was done confirming a Duodenal perforation after 24 hrs of the procedure. The patient was managed with the conservative protocol and was discharged on postprocedure day 8, and follow up was uneventful with repeat clinicoradiological evaluation to support.

Conclusion: ERCP-related perforation is uncommon but an extremely serious complication. Early diagnosis and adequate management is extremely important. Our case demonstrates the feasibility of conservative medical management in post ERCP posterior duodenal perforation avoiding morbid surgery. The timely monitoring and most appropriate treatment should be determined and put into immediate action.



#### CLINICAL OUTCOME OF SODIUM HYALURONATE INTRA ARTICULAR INJECTION IN KNEE OSTEOARTHRITIS

Dr Vinay Joshi, Dr. Ashish Gaur

Orthopaedics, R.N.T. Medical College, Udaipur

**Background:** Knee OA is chronic, progressive degenerative disease, is most common in > 50 years age patients having symptom of pain, swelling, stiffness, crepitus and function limitation, its characterised by progressive loss of hyaline cartilage, patient of OA Knee in various stages are being treated by various modalities including conservative and surgical interventions, this study includes clinical outcome of sodium hyaluronate (variant of hyaluronic acid) in knee OA.

**Objective:** To study the management of OA knee by sodium hyaluronate intraarticular injection and assess the results of above procedure in terms of benefits and complications.

**Methodology:** 50 patients of various stages of knee OA are selected for sodium hyaluronate intraarticular injection within the duration of October 2017 to March 2018 and follow-up for next 3 months. All the patient followed up for 3 months at subsequent interval of 1 week, 1 month and 3 months. They underwent 2 consecutive sodium hyaluronate intraarticular injection at 2 week interval, we measured pain, function, ROM, by visual analog scale VAS questionnaire and Goniometer.

**Results:** A significant decrease in VAS score for pain at rest at walking and weight bearing found and estimated, improvement in the pain was accompanied by improvement in ROM.

Conclusion: Knee OA affects both articular cartilage within the joint as well as the synovial fluid, viscous supplementation provides an exogenous source of sodium hyaluronate, the main protective factor contain within the synovial fluid which provide lubrications and cushioning to the joint. Sodium hyaluronate intraartricular injection results in improvement in pain and ROM.



### TO STUDY THYROID DYSFUNCTIONS IN SEVERE FALCIPARUM MALARIA

Ashish Khandelwal<sup>1</sup>, Dr. Sourav Shristi<sup>2</sup>, Dr. R L Meena<sup>3\*</sup>, Dr. Neera Samar<sup>4</sup>
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3. Senior Professor & HOD, Dept. of Medicine, RNTMC, Udaipur;
4. Professor, Dept. of Medicine, RNTMC, Udaipur

BACKGROUND: Falciparum malaria causes many types of complications like cerebral malaria, severemalaria, renal failure, ARDS, hypoglycemia, hypotension, bleeding/DIC, convulsion acidosis, GI dysfunction, microscopic hemoglobinuria, fluid and electrolyte imbalance, super added bacterial infection and endocrinechanges like pituitary thyroid axis abnormalities resuiting in sick-euthyroid syndrome like condition. In sickeuthyroid syndrome thyroid hormone level decreases in otherwise euthyroid individual.

**Aim**: This study wasdesigned to evaluate thyroid dysfunctions in severe falciparum malaria.

METHODOLOGY:-In the presant study 40 patients of severe falciparum malaria those who admitted in MBGH Udaipur were taken as cases. 20 patients of noncomplicated malaria of similar age group were taken as controls. Thyroid function test was done in all the 40 cases and 20 controls and comparative study wasundertaken according to the severity of malaria cases by the help of un-paired t-test.

**RESULTS:**- Between severe malaria with single organ involement and controls, TSH and T4 were not significantly low statistically but T3 of was significantly low statistically. Between severe malaria with two organ involvement and controls TSH and T3 were significantly low statistically but T4 was not significantly low statistically. Between severe malaria with multi organ involvement controls TSH, T4 and T3 all were low significantly.

**CONCLUSION**;- In this study TSH T3 T4 are significantly correlate in the severe falciparum malaia in comparison to control.



## WANDERING SPLEEN: UNUSUAL PRESENTATION WITH LUMP ABDOMEN

#### Hariom Turkiya, Sanjeev Singh, S.P. Gupta

Surgery, RNT Medical College, Udaipur

Wandering spleen is a rare entity with a reported incidence of <0.5%. in which the spleen is attached by a long, vascular pedicle and is without its usual peritoneal attachments and presented as a lump I lower abdomen

Radiological diagnosis of splenic infarct secondary to torsion of wandering spleen was made.

The patient was operated in surgery department and excison of spleen was done.

Radiological diagnosis of splenic infarct secondary to torsion of wandering spleen was made.

The patient was operated in surgery department and excison of spleen was done.



#### DIAGNOSING ZIKA IN LABORATORY

#### Dr Neha Choudhary, Dr. Anshu Sharma

Department of Microbiology, RNT Medical College, Udaipur

Zika virus disease first identified in Uganda in 1947 is an emerging viral disease caused by Zika virus. More than 85 countries have reported Zika transmission so far. World Health Organization declared Zika virus disease to be a Public Health Emergency of International Concern (PHEIC) on 1st February, 2016 as it has significant morbidity although negligible mortality. Later India was categorized as category 2 area of WHO classification. Zika is a significant cause of concern for developing countries like India, as the vector of disease, Aedes aegypti, breeds unchecked almost in all parts of the country.

It is vital to make a screening test for Zika virus available in areas where dengue epidemics have been reported. Ministry of Health & Family Welfare (MoHFW) has published the guidelines for laboratory detection and diagnosis of virus (prepared by ICMR-NIV, Pune) recommending RT-PCR as method of choice for diagnosing Zika virus.

As per the guidelines a survey having sample size 120 (51 males and 69 females) was conducted at RNT Medical College, Udaipur. All patients were tested for Dengue and Chikungunya by ELISA (IgM), when found negative they were further tested for Zika virus on RT-PCR analysis at our laboratory. Though all the tests were negative considering virulence of Zika virus we still need to be vigilant.



## A CASE REPORT-PRIMARY ISOLATED HYDATID CYST OF KIDNEY

Dr. Aakanksha Paniya, Dr. Priyanka Rani, Dr. Yogi Raj Joshi, Dr. Anand Raj Kalla

Pathology, SN Medical College, Jodhpur, Rajasthan

Hydatid cyst disease or human cystic echinococcosis is a zoonotic disease caused by tapeworm Echinococcus Granulosus. Hydatid cyst mainly involves liver (75%), lung (15%) of cases. Other organs are rarely involved. Renal hydatid cyst is very uncommon and represents only 2-4% of cases.

Primary involvement of kidney without the involvement of liver and lung is even rarer. We report a case of 58 years old female presented to our hospital with complaints of recurrent dull aching and non radiating pain in left lumbar region since 6 months which was partially relieved with medicine. Complete blood count, liver function test and renal function test were normal. Ultrasonography revealed a single cystic mass measuring 6.5x5.5x5.3cm at mid pole of left kidney.

Corticomedullary differentiation was not noted. CECT abdomen was done which showed well defined minimally enhanced lesion with few internal locules and septae measuring 6x6x7.67cm at anterolateral aspect of mid pole of kidney. Left radical nephrectomy operation was done and sent for histopathological examination. A diagnosis of hydatid cyst was made on histopathology report. Post operative period was uneventful and patient was discharged on Albendazole 400mg daily twice for 21 days.



# A STUDY EVALUATING THE ROLE OF HS-CRP AND SERUM COMPLEMENT C3 LEVEL AS A MARKER OF CLINICAL SEVERITY AND OUTCOME IN UNCOMPLICATED AND COMPLICATED PLASMODIUM FALCIPARUM MALARIA

### Dr Upadhyay Aditya Chandradhar, Dr D.P. Singh, Dr Hemant Mahur, Dr. Ravi Gupta

Resident, Medicine, M.B. Govt. Hospital, Udaipur

Introduction: Malaria is the most important of the parasitic disease of humans, with transmission in 106 countries containing three billion people and causing one million deaths each year. In malaria, hs-CRP is said to have a pathogenic role as it binds to infected erythrocytes and help in their clearance. This immune activation towards infected RBCs also results in various deleterious manifestations. Also, hs-CRP activates complement pathway and platelet activation, and results in various untoward effects. Thus, measurement of CRP can be useful in understanding the pathogenesis of severe malaria.

**Objectives:** To evaluate hs-CRP and serum complement C3 level as a marker of clinical severity and outcome in uncomplicated and complicated plasmodium falciparum malaria

**Methodology:** The present study included 100 untreated falciparum malaria patients attending Department of Medicine at M.B. Govt. Hospital, Udaipur (Raj.)

**Results:** Out of the 50 complicated P.falciparum patients, 35(70%) had multiple organ dysfunction syndrome (MODS) whose hs-CRP levels were  $56.93\pm9.15$  and C3 complement levels were  $0.60\pm0.26$  which was statistically significant. Similarly significant levels where found in the 5(10%) patients who had cerebral complication, 4(8%) patients who had renal complication, 3(6%) patients who had hepatic complications and 3(6%) patients who had hematological complication.

**Conclusion:** In this prospective case control study, we found that hs-CRP and C3 complement levels at presentation correlate significantly with morbidity and mortality in falciparum malaria. Thus hs- CRP and C3 complement can be considered a new, cost-effective, and reliable tool in assessment of prognosis in falciparum malaria.



# A COMPREHENSIVE STUDY TO CORRELATE LIVER ENZYMESLEVEL WITH SERUM FERRITIN LEVEL IN BETA THALASSEMIA MAJOR PATIENTS IN JHALAWAR MEDICAL COLLEGE, JHALAWAR

Dr. Chirag Malik, Dr. Mohammad Hamid

Department of Physiology, JMC, Jhalawar, Rajasthan

**Introduction**—In Beta thalassemia major, patients need regular blood transfusion to survive. Multiple blood transfusions lead to iron overload which causes injury to variousorgans including liver whichcan be measured by assessing liver enzymes.

**Objective**- To find out correlation between s. ferritin level and liver enzymes (SGOT, SGPT & ALP) in beta thalassemia major patients

Material and Methods— Eighty patients of Beta thalassemia major, from Paediatrics ward JMC Jhalawar, were studied for their serum ferritin level and liver enzymes, and statistical analysis was done.

**Result**–Mean values of s. Ferritin, SGOT, SGPT & ALP were 2336.29 +/- 1422.11 ng/ml, 101.26 +/- 49.76 U/L ,95.34 +/- 50.76 U/L ,and 193.49 +/- 50.98U/L .We found positive correlation between s.ferritin and SGOT, SGPT, & ALP. Correlation with SGOT & SGPT was statistically significant.

**Conclusion**—Two out of three studied liver enzymes showed statistically significant positive correlation with serum ferritin. Among them, SGOT showed the strongest correlation with s ferritin. So SGOT levels can be used as a proxy for s. ferritin levels in beta thalassemia major patients, to guide the chelation therapy, when the later is not available or accessible.



# A COMPARATIVE LABORATORY DIAGNOSIS OF MALARIA: MICROSCOPY VERSUS RAPID DIAGNOSTIC TEST KITS

#### Dr Sangeeta Bishnoi, Dr Anshu Sharma

Microbiology, RNT Medical College, Udaipur, Rajasthan

**Introduction**: Malaria is one of the highest killer diseases affecting most topical countries. It affects over 500 million people worldwide and over one million children die annually from malaria. Malaria is a protozoan disease caused by the parasites of the genuns plasmodium, characterized by fever, chills and rigor. Anaemia is caused by this parasite. It is transmitted from one human to another by the bite of infected gravid Anopheles mosquitoes.

**Objective**: To compare the two methods of rapid diagnostic tests (RDTs) one step malaria pf/pv Antigen test (whole blood) and microscopy in the diagnosis of malaria.

**Methods**: 200 patients who were positive by rapid diagnostic antigen (pf HRP-2 and pLDH) test for malaria parasites; thick and thin peripheral blood film prepared and stained by Giemsa stain which is examined by standard procedure under microscope.

**Results**: out of 200 rapid card test positive for malaria, 73 were positive for plasmodium vivax, 102 for plasmodium falciparum and 25 were positive for both (pv/pf). 120 out of 200 patients were positive by microscopy by diluted Giemsa stain. 44 samples out of 120 were positive for Plasmodium Vivax, 65 samples for plasmodium falciparum and 11 were positive for both (pv+pf) by microscopy.

Conclusion: We conclude based on the present study that the RDTs based on malaria antigen method appears more sensitive than microscopy. We can assume that RDTs is preliminary screening test which should be correlated to clinical features as it is false positive in certain circumstances, but in conjunction with microscopy it can improve the diagnosis of malaria.



# PREVALENCE AND ANTIBIOTIC SUSCEPTIBILITY PATTERN OF ENTEROCOCCUS SPECIES IN VARIOUS CLINICAL SAMPLES IN A TERTIARY CARE HOSPITAL IN UDAIPUR, RAJASTHAN

#### Dr Swati Singh, Dr Anshu Sharma

Microbiology, RNT Medical College, Udaipur, Rajasthan

**Introduction**- *Enterococci* are normal residents of the gastro-intestinal and biliary tracts. Though considered less virulent, it has recently become the major nosocomial pathogen exhibiting resistance to many antimicrobial agents.

**AIMS & OBJECTIVES-** To determine the prevalence and antiobiotic susceptibility pattern of Enterococcus spp. in various clinical samples.

Material & Method- This study was conducted on 100 various samples in which Enterococcus spp. were identified, in the Department of Microbiology, RNT Medical College, Udaipur. Their culture, species identification and antibiotic sensitivity testing were performed as per CLSI standards.

**Result-** Out of 100 isolates of *Enterococci*, 90% (90) were *E.faecalis*, 1% (1) was *E.faecium* and 9%(9) others. The maximum number of Enterococcus isolates obtained from urine 76%(76) followed by pus 14%(14), blood 6%(6) and tracheal swab 4%(4). The sensitivity pattern of the isolates showed an increased resistance to antibiotics like amoxicillin (66%), tetracyclin (64%), high gentamycin (63%), and ciprofloxacin (60%). All the isolates were sensitive to linezolid (100%).

Conclusion- Recent attention to enterococci is not only because of their increasing role in nosocomial infections, but also because of their remarkable and increasing resistance to antimicrobial agents like \(\theta\)-lactam antibiocs, aminoglycosides and glycopeptides like vancomycin. So, in-vitro antibiotic susceptibility testing should be done prior to start of treatment by clinicians.



# ASSOCIATION OF SERUM IRON STATUS AND INSULIN RESISTANCE WITH METABOLIC SYNDROME

#### Dr Gulab Kanwar, Ms Ritu Sharma

Department of Biochemistry, Govt. medical College, Kota, Rajasthan

**Background**: Metabolic syndrome carries risk for cardiovascular disease and development of Type 2 diabetes mellitus.

**Objective**: To evaluate association of serum iron status and insulin resistance with metabolic syndrome

Materials & Methods: Present study was carried out at department of Biochemistry, Govt. Medical College Kota Rajasthan. Patients attending Medicine OPD and IPD were enrolled in this study. Based on the inclusion and exclusion criteria 50 cases and 50 controls of age and sex-matched individuals were included in this study after obtaining informed consent. Estimation of Serum Iron & UIBC were measured by Spectrophotomerty and Ferritin & Insulin by Electrochemiluminescence immunoassay method. TIBC was calculated and Insulin resistance measured by Homeostasis Model Assessment (HOMA) method.

**Results**: A significant association (*p*-value <0.05) of Iron, UIBC, TIBC, Ferritin, Insulin and HOMA with metabolic syndrome was observed. We have found increased level of Iron, Ferritin, UIBC, TIBC and Insulin in patients with metabolic syndrome.

Conclusion: Plasma levels of Iron, Ferritin, UIBC, TIBC and Insulin were significantly higher in patients with Metabolic Syndrome. We have also found Insulin resistance in these patients. Iron stores concentration reflects systemic inflammation and contribute to cause metabolic syndrome.



### INFECTED URACHAL REMNANT IN ADULT-A CASE REPORT

#### Dr Vikas Meena

Resident, Surgery, RNT Medical College, Udaipur

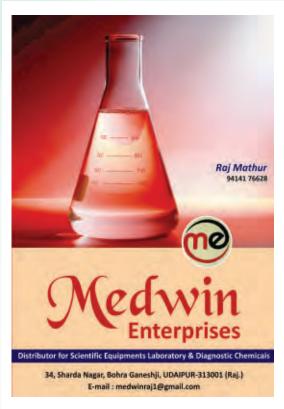
The urachus is a midline tubular structure that connects umbilicus to the anterior dome of the bladder. It is a vestigial remnant of two embryonic structures: the cloaca, which is the cephalic extension of the urogenitalsinus (a precursor of the fetal bladder) and the allantois, which is a derivative of the yolk sac. The tubular urachus normallyinvolutes before birth, remaining as a fibrous band (median umbilical remanant) with no known function.

Persistence of embryonic urachal remnants give rise to various anomalies, usually seen in pediatric age group and very rarely in adults. These remnants are prone to infection and development of malignancy. Diagnosis remains challenging due to rarity of incidence and the non-specific nature of presentation. A proper diagnostic workup by clinical and imaging tools is required and complete surgical resection is recommended to prevent subsequent re-infection or malignant transformation.

Here is a case report of infected urachal sinus in 28 yr old male adult. The diagnosis was suspected clinically and confirmed with imaging modalities. An initial broad spectrum antibiotic therapy was given followed by excision of the sinus and fibrous tract. Brief discussions were made on clinical presentation, radiological findings and management options in order to prevent further complications and recurrence of these conditions.

# Glimpses of AMUCON 2017











अमरिकन हॉरिपटल के सामने, भट्ट जी की बाड़ी, उदयपुर (राज.) फोन (0294) 2411289



## **NT-proBNP**

# Always seeing what matters



#### **Diagnosis**

NT-proBNP improves heart failure diagnosis 1 and time spent in the emergency department2

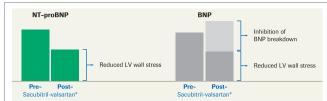
#### In-hospital management

Patients whose natriuretic peptide concentration fall during admission have lower cardiovascular mortality and readmission rates at 6 months3

#### Disease monitoring

Elevated values are powerfully predictive of adverse outcomes. Rising values identify a rising risk. Significant lowering of NT-proBNP denotes improved outcomes 4,5,6,7

#### The biomarker of choice for monitoring Heart Failure in patients on sacubitril valsartan therapy 8

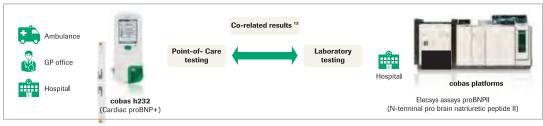


Sacubitril-valsartan\* inhibits the enzyme neprilysin, which degrades BNP, but not NT-proBNP 9,10,11

With the treatment, the cause of BNP increase is no longer clear and thus BNP (partially) loses its prognostic value12

\*Sacubitril-valsartan: INN of the commercial drug approved in USA, Europe, UK & Switzerland

#### Roche solutions for NT-proBNP estimation



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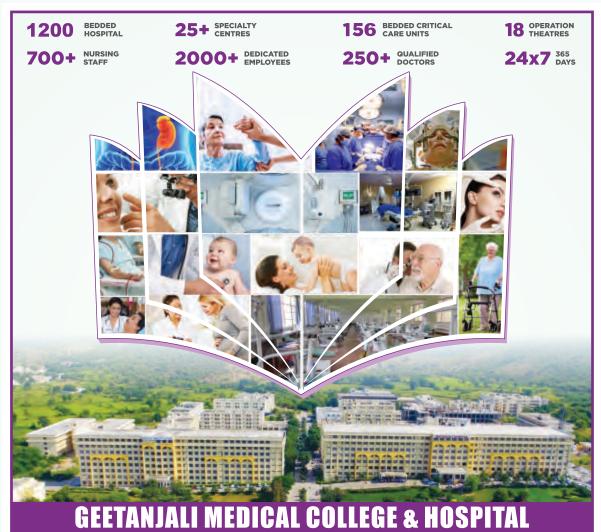
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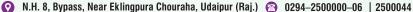
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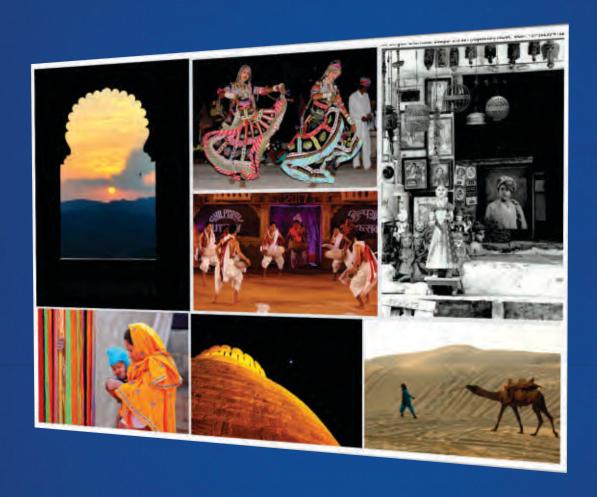


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