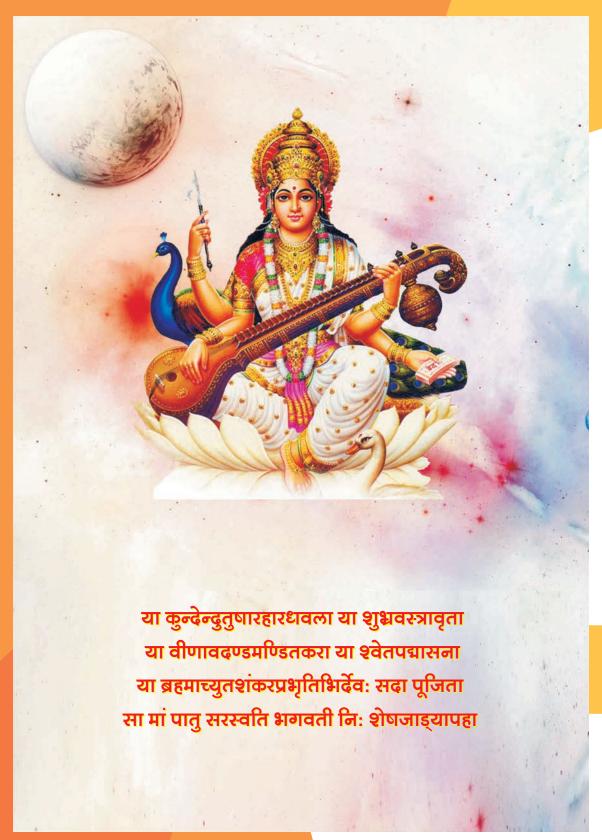


1<sup>st</sup> Annual National Conference of Association for Medical Updates

# amucon-2017

SOUVENIR

1<sup>st</sup> - 3<sup>rd</sup> September 2017 Geetanjali Medical College & Hospital, Udaipur



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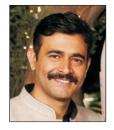
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### From the Editorial desk....



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 1<sup>st</sup> Annual Conference of Association for Medical Updates on 1<sup>st</sup> -3<sup>rd</sup> September, 2017. 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 e-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 Ashish Sharma
Organizing Secretary
AMUCON-2017

# The E-Souvenir is presented on the occasion of 1st Annual National Conference of Association for Medical Updates



Geetanjali Medical College & Hospital, Udaipur 1st - 3rd September, 2017

## **Pre Conference Workshop**

on

### "HOW TO WRITE & PUBLISH A SCIENTIFIC PAPER"

Date: 1<sup>st</sup> September 2017

Organized by:

**Association for Medical Updates (AMU)** 

&

Geetanjali Medical College and Hospital, Udaipur

### SCIENTIFIC PROGRAMME 2–3 September, 2017

Day-1: 2 <sup>nd</sup> September, 2017					
08.00 am to 09.00 am		REGISTRATION & BREAKFAST			
MORNING SESSION		Hall A – Late Smt. Narmada Devi Agarwal Auditorium			
Symposium : "Where does antibiotic stand today?"	s	Antibiotics Resistance Practical Concern of Clinicians Speaker: Dr. Mahesh Dave (09.00 am to 09.40 am)			
09.00 am to 11.00 am	١	Current Antibiotic Resistance Pattern & How to use Antimicrobial Sensitivity Report Speaker: Dr. Anuradha Sharma (09.40 am to 10.20 am)			
		Need of Rationalize use of Speaker: Dr. S.P. Dhaneri (10.20 am to 11.00 am)			
11.00 am to 12.00 no	on	INAUGURATION			
12.00 noon to 12.30 p	m	Therapeutic Advancement in interventional Radiology Speaker: Dr. Sitaram Baroth			
12.30 pm to 01.00 pm Guest Leature	1	Role of Cardiac Biochemical markers in Diagnosis of NSTEMI and Management of HF patients Speaker: Dr. Deepika Jindal			
01.00 pm to 02.00 pm		LUNCH			
02.00 pm to 05.00 pm		POST LUNCH SESSION			
<b>HALL</b> – <b>A</b> (Auditorium)		HALL – B (MEU Hall, Ground Floor, Medical College Building)	HALL – C (Demostration Room in Anatomy Dept., Ground Floor, Medical College Building)		
Award Paper Oral Paper (a) Young Scientist Award (1 to 6)		Oral Paper (21 to 30) (02.00 pm to 03.30 pm)	Oral Paper (41 to 50) (02.00 pm to 03.30 pm)		
(b) Best paper of AMUCON (7 to 12)					
(02.00 pm to 03.30 pm)					
Oral Paper (13 to 20) (03.30 pm to 05.00 pm)		Oral Paper (31 to 40) (03.30 pm to 05.00 pm)	Oral Paper (51 to 60) (03.30 pm to 05.00 pm)		
06.30 pm onwards   CULTURE EVENING AND GALA DINNER AT "BHAIR AV GARH PALACE"					

Near Maharana Partap Khal Gaon, 200 ft. Road, Chitrakoot Nagar, Udaipur

**amucon-**2017

### SCIENTIFIC PROGRAMME 2-3 September, 2017

08.00 am to 09.00 am	BREAKFAST & REGISTRATION		
09.00 am to 09.30 am	QUIZ COMPETITION (Ist Round)		
09.30 am to 10.00 am	GUEST LECTURE – 1 : Clinical spectrum of endocrine disorder Speaker : Dr. D.C. Sharma		
HALL – A (Auditorium)	<b>HALL – B</b> (MEU Hall, Ground Floor, Medical College Building )	HALL – C (Demostration Room in Anatomy Dept., Ground Floor, Medical College Building)	
GUEST LECTURE – 2     HBA1c Tinaquant     Vs HPLC     Speaker:     Dr. Susruta Sen     (10.00 am to 10.30 am)	Oral Paper (61 to 72) (10.00 am to 12.00 Noon)	Oral Paper (73 onwards) (10.00 am to 12.00 Noon)	
GUEST LECTURE – 3     Basic Concept of     Quality Control in     Diagnostic Laboratory     Speaker:     Mrs. Mamta Pednekar     (10.30 am to 11.00 am)			
• QUIZ COMPETITION (Final Round) (11.00 am to 12.00 Noon)			
12.00 Noon to 01.00 PM	POSTER PRESENTATION ( Hall – P: Ground Floor Hall – Q: First Floor Hall – R: Second Floor	Medical College Building) Poster No. : 1 to 25 Poster No. : 26 to 50 Poster No. : 51 onwards	
01.00 pm onwards	VALEDICTORY FUNCTION (AUDITORIUM) & LUNCH		

Organised by:

GEETANJALI MEDICAL COLLEGE & HOSPITAL

Udaipur - 313001 (Raj.)





Dear Dr. Ashish Sharma,

It is a matter of pleasure for me to note that the Geetanjali Medical College & Hospital is organizing the  $\mathbf{1}^{\text{st}}$  Annual National Conference of Association for Medical Updates at GMCH from  $\mathbf{1}^{\text{st}}$  to  $\mathbf{3}^{\text{rd}}$  September, 2017.

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 1<sup>st</sup> Annual National Conference of Association for medical Updates.

J.P. Agarwal
Chairman
Geetanjali Group of Institutes



It gives me pleasure to learn that Geetanjali Medical College & Hospital are going to organizing the 1st Annual National Conference of Association for Medical Updates on 1st to 3 rd Sep. 2017.

The theme of the conference - Therapeutic and Diagnostic Advancement in Medical Science, 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 2017 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 1st Annual National Conference of Association for Medical Updates on 1st to 3rd September 2017 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, GMCH, Udaipur



Dear Dr. Ashish Sharma,

The Department of Biochemistry of Geetanjali Medical College & Hospital is organizing the 1<sup>st</sup> Annual National Conference of Association for Medical Updates at GMCH on 1<sup>st</sup> & 3<sup>rd</sup> September, 2017 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 E Souvenir is being published in commemoration of the occasion.

I take this opportunity to congratulate you and your team members and wish the AMUCON2017 a grand success.

Ankit Agarwal Executive Director GMCH, Udaipurv



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-2017, UDAIPUR

# ABSTRACTS FOR YOUNG SCIENTIST AWARD

### YS1.

# Analysis of association of genetic variability at the ACE locus in intron 16 with essential hypertension

### Patel DD, Dikshit N

**Background:** Essential hypertension is thought to result from interplay between multiple genetic and environmental factors. Genetic variations as described with angiotensin-converting enzyme (ACE) gene in the form of Diallelic [insertion/deletion (I/D)] polymorphism have been reported inconsistently as being a putative mediator of hypertension.

**Objectives:** To assess the presence of ACE gene polymorphism [insertion/deletion (I/D)] in essential hypertensive patients and to determine the effects of the three ACE polymorphic variants in intron 16 for a possible role in modulating essential hypertension.

**Methodology**: A total of 138 consecutively enrolled essential hypertensive patients and 142 controls were examined using a case control approach. In all recruited individuals genotyping was performed using polymerase chain reaction and alleles were visualized on 1% agarose gel after ethidium bromide staining under UV light as a 190 bp fragment in the absence of an insertion and a 490 bp fragment in the presence of the insertion (genotypes described as II-490 bp, ID-490+190 bp, and DD-190 bp). The distribution of alleles in studied groups was tested for fitting to the Hardy-Weinberg equilibrium and to assess the correlation between I/D polymorphism and hypertension both univariate (chi-squared and t-test) and multivariate (multivariate binary logistic regression with adjusted odds ratios) analyses were applied. P<0.05 was considered statistically significant.

**Results:** No departure from Hardy-Weinberg equilibrium was observed in either cases or controls for the studied SNP. An increased frequency of mutant allele of ACE (p=0.0038) was observed among patients affected with hypertension, which resulted in significant difference in genotypic and allelic (p<0.05) distribution between cases and controls. A significant association was found for D/D variant (p=0.0061) of ACE gene with essential hypertension and is substantiated by a statistically significant increase in odds of hypertension (OR:2.11; CI:1.26-4.48; p=0.002) in multiple logistic regression analysis.

**Conclusion:** Genetic variation at the ACE locus as D/D variant in intron 16, play critical role in BP (dys)regulation. Thus this polymorphism might be considered as a potential genetic susceptibility locus (genetic marker) for an individual's susceptibility to hypertension.

### YS2.

# A STUDY TO EVALUATE THE EFFECT OF VITAMIN E SUPPLEMENTATION ON THE MENOPAUSE RATING SCALE SCORES AMONG PERIMENOPAUSAL WOMEN

Mallick AK, Ahsan M, Department of Biochemistry, Rohilkhand Medical College, Bareilly

**Background:** Post- Women's Health Initiative trial, Hormone Replacement Therapy (HRT) has fallen into disrepute. Other alternative therapies are being explored for the management of menopausal symptoms.

**Aims:** To evaluate the efficacy of vitamin E in the management of menopausal symptoms among perimenopausal women.

**Methodology:** A prospective randomized placebo-controlled single-blinded study was conducted. Thirty perimenopausal women between 35-50 years, who declined HRT for menopausal complaints, were enrolled. Selected patients were randomly distributed into two groups A and B. Group A (n=15) was given 800 IU of vitamin E per day in two divided doses for a period of three months while group B (n=15) was given placebo (soft gel capsules) orally twice daily for 3 months. Menopause Rating Scale (MRS) was used to evaluate the response to treatment. Paired t-test and independent t-test were applied for statistical analysis.

**Results:** Among the vitamin E group, the somatic and psychological scores improved by 22.44% (p<0.05) and 14.63% (p<0.01) respectively. Somatic and psychological scores also improved significantly among those on placebo. Urogenital subscale scores did not improve among both groups. Though total scores improved by 18.34% (p<0.05) among vitamin E group, it was not significantly different from the 13.64 % (p<0.05) total score improvement seen in the placebo group.

**Conclusion:** Vitamin E was not superior to placebo treatment for management of menopausalymptoms.

### YS3.

# THERAPEUTIC PLASMA EXCHANGE IN NEUROMYELITIS OPTICA: A CASE REPORT

Sharma S<sup>\*</sup>, Bundas S, Narain R, Sharma A, Singh A

Department of Immunohaematology and Transfusion Medicine,

SMS Medical College and Hospital, Jaipur

**Background:** Neuromyelitis optica (NMO) is an idiopathic inflammatory disease of the central nervous system (CNS) that commonly presents with optic neuritis or transverse myelitis. High-dose intravenous methylprednisolone (IVMP) is typically administered to treat acute exacerbations of NMO, but this is ineffective in some patients. Therapeutic plasmapheresis appears to be effective in patients with NMO who do not recover after IVMP treatment.

**Objectives:** To evaluate the clinical efficacy of therapeutic plasmapheresis in patients with NMO spectrum disorder (NMOSD).

**Methodology:** Therapeutic Plasma Exchange was performed for this patient on three alternative days using HAEMONETICS MCS+. On each occasion approximately 1500 ml plasma was extracted with 100% replacement. Replacement was done with 5% albumin and 2 units of group compatible crossmatched fresh frozen plasma at the end.

**Results:** The clinical improvement in terms of increased muscle power from 0/5 to 1/5 in left lower limb, 0/5 to 3/5 in right lower limb, from 0/5 to 4/5 in right upper limb and from 1/5 to 5/5 in left upper limb was observed. Patient was discharged with stable condition and shifted to immunosuppressants (Azathioprine 50 mg Bd), and Prednisolone 40Mg Bd.

**Conclusion:** In Acute exacerbation of NMO role of plasma exchange is established. Combination therapy with IVMP (intravenous methylprednisolone) and therapeutic plasma exchange is more efficient then iv methyprednisolone mono therapy.

### YS4.

# CHANGING MICROBIAL TRENDS WITH THEIR ANTIBIOGRAM AND ANTIFUNGAL SUSCEPTIBILITY PATTERN IN CASES OF CHRONIC SUPPURATIVE OTITIS MEDIA, AT A TERTIARY CARE POST GRADUATE TEACHING INSTITUTE

Kulshrestha A, Pradhan S, Kulshrestha M, Dept of Microbiology, NIMS, Jaipur

**Background:** Advent of newer antibiotics for CSOM treatment has lead to constant change in microbial flora and emergence of organisms resistant to commonly used drugs

**Aims:** To isolate and identify bacteria and fungi causing chronic suppurative otitis media and to determine antibiotic and antifungal susceptibility pattern

**Methodology:** 50 cases of CSOM attending ENT department during Jan to May 2017 were enrolled. Two sterile swabs were collected from middle ear; isolation and identification of bacterial and fungal isolates were done by standard phenotypic microbiological procedure. Antifungal and antibiotic susceptibility was carried out using disc diffusion method.

Results: Out of 50 cases, 89% patients had unilateral & 11% bilateral CSOM. Peak age was 11-20 yrs (32%) and 64% were females and 36% male. Pure growth in 68% patients whereas mixed growth in 17%. Commonest organisms were Pseudomonas species (29%) and Staphylococcus aureus (20%). Staphylococcus aureus isolates, all were sensitive to Linezolid, Vancomycin and Rifampicin. MRSA in 27%. Pseudomonas aeruginosa isolates, all were sensitive to Ticarcillin/Clavulanic Acid, Ceftazidime, Colistin and Polymyxin-B. Amongst antibiotic eyedrops, gentamycin has highest sensitivity (60%), followed by Ciprofloxacin (57%). Fungal isolates include Aspergillus niger (46%), Candida albicans 27%, Candida tropicalis (9%), Rhizopus (9%) and Alterneria (9%). Candida albicans was resistant to Fluconazole (22.6%), Voriconazole (13%), while 100% sensitive to Amphotericin B and Nystatin.

**Conclusion:** Amongst tropical antibiotics, we found gentamicin and ciprofloxacin as best choices, they should be used judiciously to prevent the emergence of resistance.

### YS5

# ASSESSMENT OF NEUROPHYSIOLOGICAL VARIABLES IN TERMS OF EVENT RELATED POTENTIALS FOR INTENTION TO MASQUERADE TRUTH

Gupta U, Dube A, Saini A, Patel B, Sharma G Department of Physiology, SMS Medical College, Jaipur.

**Background:** The amplitude and latency profile of P300 component of the ERPs, so assessed as neurodynamical variables of P300, would serve as an objective and unbiased surrogate tangible marker for concealed information in subjects belonging to deception group.

**Objectives:** The aim of the present study was to investigate whether Event Related Potentials (ERPs) can reveal a hidden psychological process such as concealment of an already known fact.

**Methodology:** After obtaining the desired clearance from the institutional ethical committee, the two groups of "Deception" and "Control" of 30 subjects each, respectively were selected in the age group 18-25 years. The candidates were asked to select one playing card (probe) from five and subsequently a joker (target) and five cards were presented randomly one by one on monitor in a dimly lit sound attenuated room. In concealing condition participants were asked to deny the card selected and all other cards by pressing NO except joker, for which YES was required to be pressed. The electroencephalographic (EEG) wave — forms were recorded using 10-20 international system of electrode placement. The data so obtained was selectively averaged for Pz electrode site and P300 ERP component was evaluated in terms of amplitude and latency. The obtained parameters were compared between both groups and a p-value of < 0.05 was accepted for a difference in mean values to be significant.

**Results:** The results of the present study indicated that amplitude of the P300 component of ERP in Deception group was observed to be greater as compared to that observed in Control group.

**Conclusion:** P300 component of the ERP can serve as a proxy marker to reveal a hidden psychological process like concealment.

### YS6.

# The case control study to establish the relation between serum prolactin level and acute non haemorrhagic ischemic stroke

Joshi P, Department of Medicine, GMCH, Udaipur

**Objectives:** To establish the relation between serum prolactin level and acute non haemorrhagic ischemic stroke/ transient ischemic attack, with hypertension and diabetic profile in study subjects and to find out the association between total cholesterol/HDL ratio and prolactin status in test subjects.

**Methodology:** This study was conducted on patients admitted to medicine ward with first clinical attack of stroke (within 7days of onset) in Maharani Bhupal government hospital, Udaipur. 80 patients admitted with stroke (CT/MRI brain proved) were selected for the study, of this 65 patients had first time thrombotic stroke. Patients having recent MI, previous history of stroke/TIA and other factors known to alter serum prolactin level were excluded out. Control subjects, age and sex matched were selected from general population. Detailed physical and neurological examination was done. All routine investigation including serum prolactin level after 12 hours of fasting and ruling out recent exercise and coitus was done in both groups.

**Results:** Majority of patients in each group observed to be males as compared to females, mean age in case group was found to be  $64 \pm 13.9$ years & in control group  $62 \pm 14.5$ years (p=0.50). Mean prolactin level of cases and control found to be  $36 \pm 39.8$  and  $16 \pm 13.5$  mg/dl respectively (p=0.01). Odds ratio as an estimate of relative risk showed that prolactin positive subjects had four times more risks of ischemic stroke as compared to controls. 70% of hypertensive cases found prolactin positive while 60% of nonhypertensive cases found to be prolactin negative (p=0.03). 83.4% of diabetic cases found prolactin positive while 57.9% of nondiabetic cases found to be prolactin negative (p=0.01). In cases mean TC/HDL ratio observed to be greater in prolactin positive cases as compared to prolactin negative cases (P=0.04).

**Conclusion:** Prolactin positive status found to be significantly associated with hypertensive status, diabetic status and mean TC/HDL level in cases of ischemic stroke so it can be concluded that prolactin positivity found to have certain positive association with ischemic stroke that needs to be further explored.

# ABSTRACTS FOR BEST PAPER AWARD

### BP1.

# Gender preferences among women of reproductive age group of Urban slums around Basai, Gurugram, Haryana

Redhu A, Department of Community Medicine, SGT Medical College, Guruqram

**Background:** As per 2011 census the sex ratio is lowest in Haryana as compared to other states. This study aims to find out gender preference among females of reproductive age group and associated determinants for selective sex selection of offsprings.

**Objectives:** To see selective gender preference to offsprings among currently married women of reproductive age group and to identify the determinants for selective sex selection in offsprings.

**Methodology:** A community based cross sectional study was done in urban slums near Basai, Gurugram. Considering 50 % mothers would prefer a child of particular sex,50 % prevelance is taken as the sample size is calculated with a confidence interval of 95% with 5% allowable error. Sample Size=Z2PQ/L2=385.

**Results:** Results:Out of the 385 study women, 26.6% were prim gravida and 73.4%were multigravida.72% of the women desired to have two children, 28 % desired of 3 children or more. Most of the females (98%) were aware of the sex determination technique in spite of the fact that it was a crime. 74% of the prim gravida females wanted to have their first child as a boy.91% of the females with first child as a baby girl wanted second baby as a boy. Almost all females with first two child as female and wanted to have more than 2 children desired of a male child. Multiple reasons for male preference was figured out such as Propagation of family name (69 %), support at old age (19 %), demand for male child from family members(12 %)

**Conclusion:**Community should be made aware of the gender imbalance and the community as well as the leaders should come forward to address each of these determinants. Mechanisms such as social security, bringing checks and balances on dowry system should be brought in place in order to restore the sex ratio. Strict implementation of regulations such as PNDT act could serve as an effective vehicle for control of female foeticide.

### BP2.

# A study on assessment of magnitude of malnutrition among children <5 years of age and factors affecting it

Mehta S, Chetan, Keerti, Poornima, Dept. of PSN, RNT Medical College, Udaipur

**Background:** A good nutrition is essential for the growth of children. Malnutrition is frequently part of a vicious cycle that includes poverty and disease. Socioeconomic, political changes and proper nutrition can improve health. Malnutrition is like an iceberg, most people in the developing countries live under its burden. Thus it is the need of the hour to take an account of it.

Objective: To assess magnitude of malnutrition among children <5 years of age and to study its association with major socio-demographic factors.

**Methodology:** A community-based cross-sectional study conducted in Udaipur, Rajasthan over a period of 6 months using self-made pretested questionnaire for collection of data and "WHO Child Growth Standard simplified field-table" for measurement of anthropometric indices. A total of 260 under-five children selected from 52 urban slums of the city using systematic random sampling, thoroughly interviewed and examined for their weight and height. Sample-size calculated by Epilnfo6 taking the prevalence of malnutrition as 40%(NFHS-3). Data analysed using spss16 and a 'p-value' <0.05 considered statistically-significant.

**Results:** Maximum children belonged to 13-24 months(32.7%) age-group, male gender(51.5%), Hindu religion(68.8%), nuclear families(66.5%), fullyimmunized(68.8%) and socio-economic class-IV(43.5%). Overall literacy status of mother was 57.4%. 71.2% of the children were in a state of "Anthropometric-

Failure", higher in Hindu children, nuclear family, forth or more birth-order, partially immunised and illiterate mother. The prevalence of underweight children was 48.8%, stunting was 56.5% and of wasting was 28.5%. Severely undernourished(<3 SD) also seen-18.5% according to height-for-age, 18.5% according to weight-for-age and 9.2% according to weight-for-height.

**Conclusion:** The extent of malnutrition is quite high. Effective communication for behavioral change should therefore be done for ensuring optimal infant feeding and multipronged approaches like growth monitoring, nutritional supplementation, rehabilitation and nutrition education are required.

# BP3. STUDY TO ESTABLISH THE ROLE OF THE SERUM FERRITIN AS A PROGNOSTIC MARKER IN PATIENTS OF STROKE

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**Background:** One of the prognostic indicator which has gained great clinical interest in recent times is the levels of serum ferritin for cerebral infarction and cerebral haemorrhage. Initially considered only as a stress response to stroke, serum ferritin is now under research as a prognostic indicator.

**Objectives:** To establish the role of the serum ferritin as a prognostic marker in patients of stroke.

**Methodology:** A total of 100 patients of cerebrovascular accidents presenting within 48hrs of symptom onset confirmed by CT scan and 50 healthy controls were included in the study. In vitro quantitative determination of ferritin in human serum was done. Neurological assessment was done by Canadian stroke scale and CT/MRI on day 1 and 5 or earlier if the condition of the patient deteriorated.

Results: Level of serum ferritin has direct correlation with worse prognosis in patients of stroke. The mean serum ferritin of healthy controls was 73.17ng/ml. The mean level of serum ferritin in the group of clinically improved (89.540 ng/ml) was much lesser compared to the group clinically deteriorated or died (341.345 ng/ml) among patients of ischaemic stroke. Similarly in haemorrhagic stroke it was 86.838 ng/ml in improved group compared to 355.759 ng/ml in deteriorated. Both the differences were statistically significant and (p <0.001) in both types of stroke. The patients who showed deterioration on day 5 with high serum ferritin levels had changes in the repeat neuroimaging as haemorrhagic transformation in infarct and perilesional edema in haemorrhage, the correlation being statistically significant (p<0.001).

**Conclusion:** Elevated serum ferritin is strongly associated with early neurological deterioration in patients of stroke and is a definite prognostic marker of acute stroke, ischaemic or haemorrhagic. An elevated serum ferrttin (a marker of iron stores) herald more intensive management protocols and care for the patient as it can predict early neurological deterioration. Iron chelation therapy in acute stroke seems to be a strong theoretical possibility and further studies are required to investigate its role in the treatment of stroke.

# BP4. The correlation between Sepsis and Lipid profile

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**Background:** Present study characterizes the impact of infectious disease on serum lipids. Infection and inflammation produce a variety of changes in serum lipid composition, and function mainly induced by cytokines that are released during infections and inflammations. Purpose of this study is to determine the correlation between sepsis and lipid profile so as to prevent cardiovascular risk in patients with sepsis by monitoring lipid profile.

**Aim:** To study changes in lipid profile in patients with sepsis and compare with healthy individuals.

**Methodology:** An observational study was carried out in 100 septic patients and 100 healthy individual as control who attended Shree Krishna hospital, Karamsad. Total cholesterol (TC) (polychromatic endpoint method), high-density lipoprotein cholesterol (HDL-C) (dichromatic endpoint method), triglycerides (TG) (enzymatic dichromatic endpoint), Low-density lipoprotein cholesterol (LDL-C) (Friedewald formula) and CRP (Particle- enhanced turbidometric immunoassay) and blood culture reports were recorded. All tests were performed on Siemens Dimension RXL and Xpand.

**Result:** Out of 200 participants 102 were males and 98 females. Significantly low Cholesterol, HDL-C and LDL-C were found in septic patients compared to healthy individuals with (P < 0.001, P < 0.001, P = 0.03) respectively and triglyceride was increased in septic patients compared to healthy individual. (Mean = 185.9, 81.3 mg/dl).

**Conclusion:** In sepsis patients, Cholesterol, HDL-C and LDL-C levels were lower and Triglyceride levels were higher than in healthy individuals.

# BP5. Use of oral fosfomycin for treating Urinary tract infection: Need of an hour

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**Background:** Urinary tract infection (UTI) is the most commonly encountered hospital acquired infection accounts for a significant burden to the clinicians as well as laboratory. The emergence of multi drug resistance Gram negative bacteria has landed the world back to 'pre-antibiotic era'. Fosfomycin is a systemic broad spectrum antibiotic which is an alternative treatment for multidrug resistant pathogens. Fosfomycin is a relatively small hydrophilic agent with negligible serum protein binding. It is excreted unchanged in urine, achieving high concentrations for a prolonged period.

**Objectives:** To evaluate in vitro activity of Fosfomycin against gram negative uropathogens.

**Methodology:** In this laboratory based prospective study, a total of 187 urine samples with gram negative isolates were included. Urine samples were processed as per standard protocol followed by antibiotic sensitivity testing by VITEK2 as well as Kirby-Bauer disk diffusion method in accordance with CLSI guidelines.

**Results:** Out of 187 isolates 149 (79.67%) were susceptible to Fosfomycin & responded well to the therapy . Higher resistance rates were observed among inpatients in contrast to outpatients & comparative resistance was noted in case of A.baumannii & P.aeruginosa isolates.

**Conclusion:** Fosfomycin represents epoxide class of antibiotics wherin it has a braod spectrum activity against various Gram positive and Gram negative bacteria including methicillin-resistant Staphylococcus aureus(MRSA), Vancomycin resistant Enterococci(VRE) and CRE. It is a valuable therapeutic option for multi drug resistance organisms causing urinary tract infections

### BP6.

# CORRELATION OF IRON DEFICIENCY ANEMIA AND AUDITORY PATHWAY IN CHILDREN VISITING A TERTIARY CARE HOSPITAL OF SOUTHERN RAJASTHAN

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**Background** - Physiological hypothesis states that iron deficiency anemia leads to demylination of auditory pathway. So here we studied the effect of iron deficiency anemia on auditory pathway of children of age group 5 to 10 years.

**Aim-** To find out status of Auditory pathway in childern of age group 5-10 years with iron deficiency anemia.

**Methodology** - It was a case control study on children with Iron deficiency anemia, visiting the Dept. of Pediatrics, GMCH. The diagnosis of Iron deficiency anemia confirmed by various haemetological tests which includes peripheral blood film, haemoglobin, serum ferratin level.

On All iron deficiency diagnosed cases (30) and non iron deficiency normal childrens, control (10) BERA test was be performed.

**Result & conclusion** - On analysis of 30 Anemic children & 10 control for their auditory pathway development using BERA, it was found in few children (3) there was delayed transmission of signals to midbrain i.e. .06ms. So it indicates that there was demyelination due to iron deficiency.

# ABSTRACTS FOR ORAL PAPER

### OP1.

### KNOWLEDGE, ATTITUDE AND PRACTICE STUDY ON EXCLUSIVE BREASTFEEDING AMONG MOTHERS ATTENDING IMMUNIZATION CLINIC OF TERTIARY CARE HOSPITAL IN SOUTH RAJASTHAN

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**Background:** Exclusive breastfeeding (EBF) has very important role in securing effective, long term lactation and baby wellbeing. Early to start and EBF for first 6 months of life has many advantages but it still has not been adopted in India due to lack of proper knowledge of Breast Feeding, various social beliefs and taboos. Still EBF remains a big challenge in our society. Aims: To assess the knowledge, attitude and practices towards exclusive breast feeding in postnatal mothers.

**Methodology:** The study was conducted between May, 2017 to June, 2017. The study included 620 mothers who had at least one child under one year of age and who attended Immunization clinic of RNT Medical College, Udaipur. Mothers were interviewed personally with the help of a fixed questionnaire regarding their knowledge, attitude and exclusive breast feeding practices.

**Results:** In our study, majority (89.5%) of the mothers were breast feeders. However, only 35% of the mothers were exclusive breast feeders. Majority of mothers (92.7%) had heard about EBF, only 42.6% had knowledge about the recommended duration. However majority of mothers had adequate knowledge about EBF but practices regarding EBF was inadequate.

**Conclusion:** It is important to provide ante-natal education to mothers on exclusive breast-feeding. There should be strengthening the public health education campaigns to promote breast-feeding. Health care providers and nursing staff should be encouraged to actively participate in proper counseling and training of mothers. Keywords: Exclusive breast feeding, Knowledge, Attitude, Mothers

### OP2.

# CORRELATION OF HbA1C LEVELS WITH BODY MASS INDEX IN NEWLY DIAGNOSED POLYCYSTIC OVARIAN SYNDROME WOMEN

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Pt. B. D. Sharma PGIMS, Rohtak, Haryana,

**Background:** Polycystic ovary syndrome (PCOS) is a heterogeneous, multisystem endocrinopathy in women of reproductive age manifested with various metabolic disturbances and a wide spectrum of clinical features such as obesity, menstrual abnormalities and hyperandrogenism. It was reported that in obese PCOS women, the prevalence of insulin resistance was higher than obese women without PCOS in the control group.

**Objectives:** To correlate HbA1c levels with body mass index (BMI) in newly diagnosed polycystic ovarian syndrome (PCOS) women.

**Methodology:** This is a case-control study was done in Pt. B. D. Sharma PGIMS, Rohtak including 30 newly diagnosed PCOS patients and 30 age matched healthy controls of any age but not on treatment. Fasting venous blood samples were obtained from cases and controls for analysis of fasting blood glucose, haemoglobin, HbA1c after getting written consent.

**Results:** HbA1c had significant difference between cases  $(6.03\pm0.19\%)$  and controls  $(5.35\pm0.08\%)$  with p = 0.002. 33.3% were in impaired glucose tolerance range (5.7-6.4%), 36.7% in diabetic range (?6.5%) & 30% in non diabetic range (<5.7%). BMI of cases  $(26.09\pm4.2 \text{ Kg/m2})$  showed significantly higher difference than controls  $(22.9\pm3.3 \text{ Kg/m2})$  with p=0.002. HbA1c had significantly positive correlation with BMI (p=0.000).

**Conclusion:** BMI has significant role in glycemic control in PCOS pathogenesis.

### OP3.

# Treatment Behavior of Dog-bite Patients Attending Anti Rabies Clinic in RNT Medical College, Udaipur

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**BACKGROUND:** Dog bite is common and rabies is endemic in India. Every patient attending ARC has its own knowledge and belief about treatment initiation; adherence and also some misconceptions are prevalent in society. Recording of treatment behavior as well as misconception about rabies is very helpful to guide patients properly and understand the patients approach towards it.

**OBJECTIVES:** To find out patients profile, treatment behavior, myths and misconceptions about dog bite in patients attending Anti rabies clinic.

**METHODS:** A cross sectional study with predesigned and semi structured proforma conducted on patients attending anti rabies clinic, RNT medical college, Udaipur from June to August, 2016.

**RESULTS:** Out of 631 patient attending ARC 70.7% were male and 29.3% were females. More than 50% patients were urban (52.5%). Most prevalent misconception is applying lime (53.9%) then chili (35.7%), others are tobacco, cow dung etc. Most people avoid cooking oil (53.9%) and sour things (61.0%) in edibles. 45.2% patients not washed their wounds; only 25.7% are washed with soap & water while 29.2% washed only with water. Nearly 55% patients adhere to treatment on dates prescribed and 7.4% patients did not return after first dose of vaccine to follow the schedule. Rest of the patients (37.8%) either took vaccines irregularly (23.7%) or escapes any of 4th, 5th or both doses (14.1%).

**CONCLUSION:** Myths and misconceptions are still prevalent in society and treatment adherence needs to improve more as rabies is a fatal outcome disease through proper counseling and awareness campaigns.

### OP4.

# MANAGEMENT OF 6 TO 59 MONTHS CHILDREN WITH SEVERE ACUTE MALNUTRITION BY POSHAN PROGRAM IN BLOCK SHAHBAD BARAN DISTRICT IN SOUTH RAJASTHAN

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**Background:** Total under five population of Rajasthan(2011) is 7302170 and under five mortality rate is 57(SRS 2013). Prevalence of 6-59 months children under Severe Acute Malnutrition (SAM) 2.9% (RSOC 2013-14). Among these children with SAM with complication 22000 (10%) and children with SAM without complication 200000 (90%). Children with SAM without complication can be cured in their households in the community with implementation of appropriate nutritional support (Poshan) that helps the SAM children without complications to recover faster.

**Aims and Objectives:** The aims of the study was to assess the nutritional status, implement a nutritional support (Poshan), evaluate its effect on nutritional outcome of children enrolled under Poshan program and also educate parents and SAM children for maintaining hygiene and Sanitation.

**Material and Methods:** This Poshan program was carried out on 370 SAM children (6 to 59 months) of 31 tribal village of shahbad. In addition of routine assessment parameters, the MUAC tape was used to assess the nutritional status of subjects. This was an interventional study for a duration of six months . MUAC and Z score was the criteria for identifying the SAM children in house to house survey by health workers. The collected data entered in Micro Soft Office Excel 2007 and analyzed by SPSS ver.16.00 and appropriate statistical tests used for statistical significance.

### Results:

370 SAM children were enrolled to the program out of which 364 were discharged healthy from the program and 4 children were defaulter(left program in between) and 2 deaths reported.

**Conclusion:** The Poshan Amrit (the packet food) given to SAM children caused tremendous weight gain suggests that the Nutrition, hygiene and sanitation of SAM children given by their parents is not adequate.

### OP5.

# CORRELATES OF AWARENESS AND ATTITUDE REGARDING HIV / AIDS TRANSMISSION IN PREGNANT FEMALES ATTENDING TERTIARY CARE CENTER OF SOUTHERN RAJASTHAN.

Reja R, Bhatnager R, Kaushik P B,
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**Background:** India has the third largest HIV epidemic in the world. HIV prevalence in India was an estimated 0.26 %. HIV related stigma and discrimination remains an enormous barrier to effectively fighting the HIV and AIDS epidemic. HIV causes morbidity and mortality in infants and children, pertaining to its Parent-to-child transmission (PPTCT) risk. PPTCT which occur during pregnancy, labour and breastfeeding, is responsible for 90% childhood HIV infection. According to National family health survey (NFHS-4) 2015-16 prevalence of knowledge of HIV/ AIDS among adult women is 19.1% as compared to adult men which is 37.4%

**Aims :** To assess the awareness regarding HIV/AIDS transmission in pregnant women and their attitude towards people living with HIV/AIDS(PLHA).

**Methodology:** It was a hospital based cross-sectional study conducted from May 2017 to June 2017. This study was carried out on pregnant mothers attending antenatal clinic at M.B Hospital associated with R.N.T.Medical College, Udaipur. 320 pregnant mothers were interviewed. The information was collected using a semi structured questionnaire.

**Results:** Out of 320 pregnant females majority were of age group 20-25 years ,68%were housewives.77% mothers knew that HIV is transmitted by sexual route.30% of the mothers thought that one could get infected by merely touching an HIV positive people. 72% stated that they would dismiss their maid on finding out her HIV positive.

**Conclusion:** The awareness regarding HIV/AIDS is still low , so there is a need to focus on I.E.C. activities.

### OP6.

# Simplified Indian Diabetes Risk Score For Screening Undiagnosed Diabetes In A Rural Setting Of Gurugram, Haryana.

Jain A, Department of Community Medicine, SGT medical college, Gurugram, Haryana.

**Introduction:** Worldwide, the number of people with diabetes has substantially increased between 1980 and 2014, rising from 108 million in 1980 to 422 million in 2014. The prevalence of Diabetes among 20-79 years in India is 8.7%. Identifying undiagnosed cases is essential to quantify the disease burden, particularly in least developed settings where diagnosis is uncommon. Hence an attempt is being made to study the prevalence of Diabetes Mellitus and its relative importance of risk factors in rural population of Gurugram.

**Material & Method:** Study setting: The study was conducted in Rural field practice area attached to the department of Community Medicine, SGT medical college, Gurugram, Haryana.

Study design: This was a cross sectional study.

Study period: This study was conducted during the month of April 2017.

Study subjects: 1 Anganwadi was selected using simple random sampling from the list of Anganwadi in Rural field practice area. 150 individuals were interviewed from that Anganwadi area. From each household only one subject was selected by lottery method for interview.

Inclusion criteria: All individuals >20 years were included in the study.

Exclusion criteria: Previously diagnosed Diabetic patients, pregnant women, those who did not gave written consent were excluded.

Data collection: Data was collected using a predesigned and pre-tested questionnaire which included Indian diabetes risk score (IDRS) developed by Mohan et al.

Data analysis: Data was analyzed using SPSS (Statistical Package for Social Studies) version 20.0 as per objectives of the study.

**Results:** Out of the 150 participants 92 (61.3%) were male while 58 (38.7%) were female. The prevalence of high risk group among the study subjects with body mass index of <25 and ?25 were 49.3% and 63.9% respectively where as the prevalence of low risk group among the corresponding study subjects were 10.5% and 4.2% respectively. Weight, BMI, Waist Circumference and fasting blood levels were on higher side among high risk group followed by moderate & low risk group and difference is statistically significant. In our study population, Age, family history and BMI had an independent association with prevalence of Diabetes.

**Conclusion:** Diabetes mellitus is reaching potentially epidemic proportions in India. The level of morbidity and mortality due to diabetes and its potential complications are enormous, and pose significant healthcare burdens on both families and society. Worryingly, diabetes is now being shown to be associated with a spectrum of complications and to be occurring at a relatively younger age within the country. Given the disease is now highly visible across all sections of society within India, there is now the demand for urgent research and intervention - at regional and national levels - to try to mitigate the potentially catastrophic increase in diabetes that is predicted for the upcoming years.

#### OP7.

## MEASUREMENT OF OXIDATIVE STRESS MARKERS AND ANTIOXIDANT STATUS IN PATIENTS OF ALCOHOLIC LIVER DISEASE AND ITS CORRELATION WITH LIVER ENZYMES.

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**Background:** The excessive consumption of alcohol is an important cause of death and disease worldwide. The intake of alcohol is affected by socio-economic status, stress, family history, mental health and ethnicity of the person. In the recent years ,alcohol abuse has increased exponentially in the developing countries .Although alcohol can damage several organs, alcoholic liver disease is the most common medical consequence of excessive alcohol intake

**Aims:** To evaluate Malondialdehyde, Superoxide dismutase ,glutathione peroxidase, and liver function test in alcoholic liver disease patients.

**Methodology:** A hospital based cross sectional study was done for one year and 50 cases(suffering from alcoholic liver disease) and 50 controls aged > 20 years and <60 years were taken as study subjects. Levels of AST, ALT, ALP, Total proteins, Superoxide dismutase, Glutathione peroxidase and Malondial dehyde were estimated.

**Results:** The differences in the mean values of the parameters in the two groups was calculated and significance was determined by using the 't'-test. The levels of AST,ALT,AST/ALT ratio, ALP ,Malondialdehyde, Superoxide dismutase, Glutathione Peroxidase were higher in cases whereas the levels of Total serum proteins were higher in controls. Positive association among the study subjects (Cases and Controls) was observed for AST,ALT, AST/ALT Ratio, ALP, Total Plasma Proteins, Malondialdehyde , Superoxide dismutase, Glutathione Peroxidase whereas Negative association was observed for Total serum proteins. The association among all the variables (AST,ALT,AST/ALT Ratio, ALP, Total Plasma Proteins, Malondialdehyde , Superoxide dismutase, Glutathione Peroxidase) was found to be statistically significant (P<0.05)

## OP8. SERUM FETUIN LEVELS IN NEWLY DIAGNOSED TYPE 2 DIABETES MELLITUS PATIENTS

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**Background:** The pathophysiologies of type II DM are reduced insulin sensitivity and increased insulin resistance. Serum fetuin-A is a multifunctional circulating glycoprotein which inhibits the insulin receptor tyrosine kinase activity and induces a low grade inflammation which results in insulin resistance. High levels of fetuin-A are associated with insulin resistance.

**Objectives:** To determine serum concentration of Fetuin-A to elucidate its role in the pathogenesis of diabetic patients.

**Methodology:** The present study included 100 cases and 100 age matched healthy controls, visiting medical outpatient department of SGT Medical College and Hospital, Budhera, Gurugram, Haryana. Sample were analysed for the measurement of fasting plasma glucose (FPG), postprandial blood glucose (PPBG), lipid profile, HbA1c and Serum Fetuin-A (by ELISA).

**Results:** The mean FPG, PPBG, Total Cholesterol (TC), Triglycerides (TG), VLDL, LDL, HbA1c and serum fetuin-A levels were significantly higher with P<0.001 in diabetic group compared to controls. Also there was a positive correlation between serum fetuin-A in diabetic patient group (r-0.465, P<0.001) when compared to healthy controls.

**Conclusion:** Findings of this study concludes that serum fetuin is significantly elevated in patients with type 2 diabetes mellitus when compared to healthy individuals and it indicates that serum fetuin -A may play a role in pathogenesis of diabetes.

#### OP9.

### Sexual Dimorphism and Regional Difference in sacral index of Human sacrum: A Morphometric study in North India

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**Background:** Sacrum is a large triangular bone. It is formed by fusion of five sacral vertebrae and forms the caudal region of the vertebral column. It forms posterior superior wall of the pelvic cavity wedged between the two hip bones. Sacrum is often considered to be an important bone while dealing with sex differences in skeletal material, there is paucity of metrical data available for this bone.

**Objectives:** To study morphometric data of male and female sacrum from North Indian Population for sexual dimorphism.

**Methodology:** The present study was performed on 102 dry adult human sacrum of known sex, collected from Department of Anatomy, FMHS, SGT University, Gurugram and Department of Anatomy, Pt.B.D.Sharma, PGIMS, Rohtak. Mid ventral straight length and width of sacrum were measured and Sacral index (SI) was calculated from the measured parameters.

**Results:** The mean values of sacrum for mid ventral straight length was found to be 113.81 mm in male and 98.07mm in female, width of sacrum was 111.08mm in male and 107.21mm in female and Sacral index was 97.64mm in male and 109.90mm in female.

**Conclusion:** It is evident from the present study that sacral index is more significant in identification of female sacrum (39.21).

## OP10. MYCOLOGICAL PROFILE OF OTOMYCOSIS IN A TERTIARY CARE HOSPITAL IN RAJASTHAN

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**Background:** Otomycosis is a superficial fungal infection of the external auditory canal. The prevalence is more in hot, humid and dusty environment of tropics and subtropics. Most of the fungal agents responsible are found as saprobes in the environment and are usually secondary invaders of the tissue rendered susceptible by bacterial infections, physical injury or excessive accumulation of cerumen in the external auditory canal.

**Objectives:** To isolate and identify the various fungal etiological agents in clinically suspected cases of otomycosis.

**Methodology:** A 6 month prospective study (May to October 2016) was conducted in Microbiology department of S.M.S. Medical College & Hospital, Rajasthan. From 50 patients clinically suspected of otomycosis ear discharge specimens were collected on two sterile cotton swabs. Direct examination of specimen was done by Gram stain and 10% KOH preparation. All specimens were cultured on Sabouraud's Dextrose Agar and identification of fungus was done as per the standard protocols.

**Results:** Otomycosis was diagnosed in 80% of suspected patients. Among 50 samples, 44 samples (88%) showed positivity on KOH mount and 40 samples (80%) showed culture positivity while 6 samples (12%) were sterile. Out of 40 culture positive samples, Aspergillus species (97.5%) were the predominant isolate followed by Candida (2.5%). Among the Aspergillus, 55% isolates were Aspergillus niger, followed by Aspergillus flavus (20%), Aspergillus fumigatus (15%), mixed infection of Aspergillus niger and Aspergillus flavus (5%) and Apergillus tereus (2.5%).

**Conclusion:** Otomycosis is still a common problem and is often misdiagnosed for chronic otitis conditions. The high sensitivity of direct microscopy and culture reemphasises the need for use of both tests as a routine for microbiological confirmation of otomycosis for appropriate management and further epidemiological study.

## OP11. The Prevalence of Clinical Hypogonadism in Patients with Type-2 Diabetes Mellitus

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**Objectives:** Assessment of 100 patients of type 2 diabetes mellitus for presence of biochemical hypogonadism and the prevalence of clinical hypogonadism in and around Udaipur.

**Methodology:** This study was conducted on diabetics attending the MBGH, Udaipur. 100 male patients with diabetes mellitus type 2 were enrolled from various wards, all patients of 30-70 years age group. The exclusion criteria were patients taking drugs which were known to interfere, patients with features associated with congenital GnRH deficiency, history of tumor, exposure to radiation, head trauma, spinal cord injuries, any disease other than diabetes known to cause autonomic dysfunction. Detailed history of present illness, complete androgen defiency in the aging male (ADAM) questionnaire, past and family history of medications, hypertension and diabetes were asked. Detailed clinical examination was done. For total testosterone blood sample was taken always between 8AM and 10AM. Serum HbA1c was done.

Results: Prevalence of overt hypogonadism in diabetic patients of this region was 15% by symptoms and low testosterone level<8nmol/L. Prevalence of borderline hypogonadism in diabetic patients of this region was 30% by symptoms and low testosterone level 8-12nmol/L. Erectile dysfunction was most common symptom in these patients was 63%. The symptom was present in 71% of hypogonadism while the loss of libido was present in 69% cases. Age had definite role in occurrence of hypogonadism. The diabetics of <40 years age group had 0%, 41-50 years group had 5%, 51-60 years age group had 22% and >60 years group had 25% prevalence of hypogonadism. Patient with BMI>23kg/m2 had low testosterone level<12nmol/L in 64% cases and in patient with BMI>25kg/m2 the low testosterone level <12 were in 67% cases. BMI had strong negative correlation with s. testosterone level (p<0.05). Duration of diabetes also showed negative correlation with hypogonadism (p<0.05). 57% patients of HbA1c >8 were having low testosterone level but the effect of glycemic status could not be established due to p value>0.05.

**Conclusion:** Testosterone levels are frequently low in men with type 2 diabetes and the majority of these men have symptoms of hypogonadism. Obesity is associated with low testosterone levels in diabetic men. Study with larger group is warranted for confirmation of these findings in future.

## OP12. THERAPEUTIC PLASMA EXCHANGE: BOON FOR NEUROLOGICAL DISORDER

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SMS Medical College, Jaipur

**BACKGROUND:** Therapeutic plasma exchange (TPE) is a procedure that reduces circulating autoantibodies in patients. TPE is commonly done in neurological disorders where autoimmunity plays major role.

**AIMS:** We report our experience with regard to indications, adverse events and outcomes of plasma exchange in neurological disorders.

**METHODOLOGY:** 78 patients were included to this retrospective study from 1st June 2016 to 31st May 2017. All procedures were done in ICU settings with HAEMONETICS MCS+ cell separator & detailed analysis was done.

**RESULTS:** Median age was 38 years (range 1-65), with male predominance. Neurological indications included Guillain-Barrè syndrome (n = 42), myasthenia gravis (n = 24), chronic inflammatory demyelinating polyneuropathy (n = 5), multifocal motor neuropathy (n = 1), neuromyelitis optica (n = 4), multiple sclerosis (n = 1), and transverse myelitis (n = 1). Total number of TPE sessions was 307; median number of sessions per patient was 4 (range 1-10). TPE was done through central venous access in 97 % and through peripheral venous access in 3 % of the patients. Human albumin was used as replacement fluid in 63 %, fresh frozen plasma & normal saline in 100% cases. Adverse reactions were recorded in 17 % patients, were mild and manageable such as allergic reactions, hypotension and hypocalcaemia.

**CONCLUSION:** TPE is an effective treatment in neurologic diseases where autoimmunity plays an important role in pathogenesis.

## OP13. CORRELATION BETWEEN HbA1c CONCENTRATION AND LIPID PROFILES IN TYPE 2 DIABETES MELLITUS

Amer AH, Haridas N Dept. of Biochemistry, Pramukhswami Medical College, Karamsad.

**Background:** Patients with type 2 diabetes have increased abnormalities of lipid profile. Early intervention to control the level of lipid in the blood can reduce the chances of cardiovascular complications. Glycated hemoglobin (HbA1c) is the indicator of glycaemic status over the previous three months.

**Objectives:** To evaluate the correlation between levels of HbA1c and lipid profile.

**Methodology:** The study included 100 cases of type 2 diabetes mellitus who attended Shri Krishna Hospital, Karamsad.We were taken the followed patients investigations like fasting and postprandial blood sugar, HbA1c and lipid profile (Cholesterol, Triglycerides, HDL-C & LDL-C). The determination all tests were performed on Siemens Dimension clinical chemistry analyzer. The patients were classified into two groups according to the concentration of HbA1c; Good Control group having HbA1c < 7.0% and Poor Control group having HbA1c ?7.0%.

**Results:** In our study of 100 participants of type? DM, we found 74 males out of total 100 cases (38 have good glycemic control and 36 have poor glycemic control), and 26 females (12 have good glycemic control and 14 have poor glycemic control) from type 2 diabetes. HbA1c showed positive correlations with cholesterol, triglycerides & LDL (r=0.447 and p-value < 0.001, r=0.331 and p-value = 0.001, r=0.510 and p-value < 0.001) respectively, and negative correlation with HDL(r=-0.179 and p-value = 0.07,).

**Conclusion:** These results suggest that HbA1c can be used as a good parameter to predict the risk of developing diabetic complications, such as in lipid abnormalities.

#### OP14.

### Comparison of hematological parameters and CD4+ T lymphocyte count in diabetic and non-diabetic patients

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**AIM:** To study the immune status of patients with Diabetes and to compare the results with non-diabetic patients.

**Material and methods:** This was a case control study conducted in Department of Microbiology, S.M.S Medical College, Jaipur. Fifty confirmed diabetic patients and fifty non diabetic individuals with matched age and gender were included in study. From all the patients' complete blood count, random blood sugar, HbA1C and CD4 T Lymphocyte count was determined. Results of both the group were compared.

**Results:** Average value of random blood sugar in patients with diabetes was 238±11.29 and average value of HbA1C was 8.23±1.81. Patients who had HbA1C more than 8 had significantly low CD4+ T Lymphocyte count than patients with HbA1C less than 8(711 and 886 respectively).

**Conclusion:** The CD4+ T Lymphocyte count is lower among poorly controlled diabetes patients compared to non diabetic controls and diabetic cases with controlled blood sugar levels. Immunity of patients with uncontrolled diabetes is suppressed and such patients are more prone to opportunistic infections.

#### OP15.

## Left ventricular diastolic dysfunction in patients with Subclinical hypothyroidism and its reversibility after hormone therapy

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**Aim:** To assess the presence of Left ventricular diastolic dysfunction in patients with subclinical hypothyroidism and its reversibility after hormone therapy.

**Methodology:** 30 patients with subclinical hypothyroidism were included in the study along with 30 age(20-70 yrs) and sex matched individuals serving as controls from medicine OPD,indoor,endocrinology OPD at MaharanaBhupal Government Hospital. Subclinical hypothyroidism is diagnosed on basis of TSH value above normal and FT3 & FT4 in limit of normal range. All patients and controls were subjected to Doppler echocardiography for assessment of LV function before & after 6 months of thyroid hormone (Thyroxine) therapy.

**Result:** Subclinical hypothyroid patients had significant reduction in peak mitral flow velocity of early rapid filling phase, also ratio of time velocity integral of early and atrial filling (Ei/Ai) was reduced significantly suggesting augmented atrial contribution to diastolic filling (LV diastolic dysfunction). Repeat Doppler echo after 6 months of hormone (Thyroxine) therapy showed significant improvement in peak mitral flow velocity and also increased early and atrial filling.

**Conclusion**: Thyroid hormone supplement has to be initiated as left ventricular diastolic dysfunction is found to be reversible.

#### OP16.

## A CASE CONTROL STUDY OF EVENT RELATED POTENTIAL P300 WAVE IN HEADACHE FREE PERIOD OF MIGRAINE PATIENTS AND HEALTHY CONTROL SUBJECTS

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**Background:** Migraine has a modifying impact sub - clinically on cognitive skills that have been evaluated by a battery of psychological questionnaire based investigative tools both in clinical settings and community.

**Objectives:** To evaluate neurocognitive functions in migraineurs in terms of neural dynamics of endogenous P300 ERP (Event Related Potential) component through assessing the amplitude and latency of P300 wave by oddball task.

**Methodology:** The present study involved the recruitment of clinically diagnosed 30 migraine patients in age group of 18-35 year and 30 healthy age-matched healthy control subjects. Stimulus and time locked EEG was recorded for obtaining ERPs at Cz, Pz, C3, C4, T3 and T4 electrode sites using 10-20 international system and deploying auditory oddball paradigm during passive and active session in headache free period.

**Results:** The amplitude of P300 was observed to be lower in migraine group while the latency of P300 was observed to be higher in migraine group as compared to control group. A reduction of passive attention in migraine is proffered as a plausible explanation for the observed results.

**Conclusion:** There is altered cognitive processing in migraine patients in interictal period. Migraine is associated with subtle alternations in cognitive performances which might be related to structural and functional changes in brain.

#### OP17.

### Sensory nerve conduction studies in NIDDM patients without symptoms of peripheral neuropathy and healthy volunteers

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**Background:** Diabetic neuropathy is one of the commonest long term complications of non insulin dependent diabetes mellitus (NIDDM). Electro-diagnostic tests can be used to detect neuropathy at an earlier stage, even before development of signs and symptoms of neuropathy.

**Aim & Objectives:** The present study was designed to evaluate and compare the sensory nerve conduction parameters in NIDDM patients without symptoms of peripheral neuropathy and healthy volunteers aimed at improving the prognosis of peripheral neuropathy in NIDDM patients by its earlier diagnosis and hence better management and outcome.

**Methodology:** Sensory nerve conduction parameters of 35 diabetic caseswere compared with disease duration of 5-10 years and without clinically evident peripheral neuropathy (as per WHO criteria of diabetic mellitus) with 35 non diabetic genders and age matched healthy controls in age group 30-50 years. Sensory nerve conduction velocity was measured by orthodromic stimulation with the help of the EMG-NCV recording machine in right median nerve.

**Result:** Diabetic patients with high HbA1C levels were associated with reduction in amplitude and conduction velocity of all sensory nerves and increase in latency.

**Conclusion:**The reduced conduction velocity and amplitude with prolonged latency put thesepatients at a higher risk for generalised polyneuropathy and warrants early initiation of treatment of these high risk patients, which may improve the disease outcome and overall prognosis.

### OP 18. A STUDY OF HEPATIC DYSFUNCTIONS IN SEVERE FALCIPARUM MALARIA

Pambhar A, Basu A, Dept. of Medicine, GMCH, Udaipur

**BACKGROUND**: Malaria still continues to be a major killer of mankind, especially in developing countries. Falciparum malaria is a complex disease associated with multiorgan dysfunctions and fatal outcome if untreated. Malaria is re-emerging disease in last decade in india.

-AIMS: This study aims to evaulate hepatic functions in patients of severe falciparum malaria (PF) and to find out the factors associated with poor outcome.

**METHODOLOGY**: This study is carried out on 30 admitted patients of severe malaria, who were found to be positive for plasmodium falciparum in peripheral blood film .The diagnosis of severe malaria was done according to WHO criteria. The criterias were: cerebral malaria (unarousable coma), severe anemia (Hb<5gm %), renal failure and serum creatinine (>3 mg %), pulmonary edema (ARDS), hypoglycemia (blood glucose<40 mg %), circulatory coliapse,DIC, repeated generalized convulsions, acidosis (pH<7.25), macroscopic haemoglobinuria hyperparasitemia,serum bilirubin>3mg%. Routine investigations like -CBC,LFT,KFT;BLOOD SUGAR,USG,X-RAY CHEST and other were done on the day of admission . Patient with preexisting liver disease like alcholic liver disease,chronic active hepatitis, cirrhosis of liver, HBsAg positive patients,patients on ATT/hepatotoxic drugs, patients in whom the cause of hepatic dysfunction was secondary to infection like infectious -mononucleosis,enteric fever and leptospirosis were excluded.

**RESULT:** The mean age of patients was 42.27±15.57 year. There were 21 male and 9 female.serum bilirubin was raised in 56.66% of cases with 26.66% cases showing level above 3gm/dl. Patients with clinical jaundice were having raised mean SGOT,SGPT,Alakline phosphate.The jaundice was predominantly hepatic in 4, haemolytic in 7 and both hepatic and haemolytic in 8

**CONCLUSIONS:** Deranged liver and renal functions are commonly seen as a complication of severe malarial infection. Early diagnosis of liver involment in such patients and proper management can be useful for better outcome. Patients who presented late at hospital having poor outcome.

## OP19. PROFILE OF VIRUS ISOLATES IN ADULT PATIENTS SUFFERING FROM SARI AT TERTIARY CARE HOSPITAL, JAIPUR

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**BACKGROUND:** Severe acute respiratory illness (SARI) is recognized as an important cause of morbidity, mortality, and hospitalization among patients in developing countries. In 2013, the WHO published a "SARI" case definition for use in global influenza surveillance.

**AIMS:** To identify the viruses in adult patients severe acute respiratory infection (SARI) attending SMS and attached group of hospitals, a tertiary care center at Jaipur.

**METHODOLOGY:** Throat swabs were collected from 226 patients with SARI in VTM, nucleic acid was extracted by Easy Mag automated extraction system. The nucleic acid was added to master mix containing AgPath and virus specific primer probes. Virus tested were Influenza virus(A, B),Respiratory syncytial virus (RSV A and B),Human Corona viruses (HCoV:229E,OC43, HKU1, NL63),Human Metapneumoviruses(HMPV A & B), Parainfluenza viruses (PIV1-4),Human Rhinoviruses(HRV),Enteroviruses(EV), Adenoviruses (ADV),Human Bocavirus(hBoV), and Human Parechoviruses(hPeV)-by multiplex real-time PCR.

**RESULTS:** Among total 252 samples tested,103(40.8%) samples were positive for one or more viruses,single virus was detected in 90/252(35.7%) samples and multiple viruses in 13/252(5%) samples.Influenza A virus was the most commonly detected virus(45/252,17.8%),followed by Influenza B(18/252,7.1%);Human Coronavirus (HCoV)OC43(5/252,2%);Parainfluenza virus(PIV) type-3(4/252,1.6%);Human Coronavirus (HCoV)229E (5/252,2%);Human Metapneumovirus(HMPV2/252, 0.7%);Parainfluenza virus(PIV) type-4(2/252,0.7%);Adenovirus(2/252, 0.7%);Human Bocavirus(HBoV1/252, 0.4%);Parainfluenza virus (PIV) type-2(1/252,0.4%).

**CONCLUSION:** Many viruses were detected in patients with SARI. In routine labs test only for Influenza A and diagnosis of these viruses are missed. Though these viruses could be the causative agent but to rule out bacterial infection, bacterial culture should also have been done. A syndromic approach should be followed testing for all agents depending on profile of infective agents prevalent in the area.

#### OP20.

#### Prevalence Of Dermatophytic Infection In Tertiary Care Hospital In Jaipur

Mahima, Mishra RK, Bachhiwal R, Department of Microbiology, SMS Medical College, Jaipur

**Background:** Dermatophytoses refer to superficial fungal infection of keratinized tissues caused by keratinophilic dermatophytes. Dermatophytoses are the most common of the superficial fungal infections. It is common in tropics and may present in epidemic proportions in areas with high rates of humidity.

**Aims:** To determine prevalence of dermatophytic infections in SMS and attached group of hospitals, a tertiary care centre at Jaipur.

**Methodology:** A total of 320 samples received from clinically diagnosed cases of fungal infection of the skin and nails. Direct microscopy, culture and identification were done according to standard procedures.

**Results:** Among total 320 samples tested, 123(38.43%) samples were positive for fungal culture. Trichophyton mentagrophytes was the most commonly detected dermatophyte (59/123, 47.96%), followed by Trichophyton tonsurans (53/123, 43%), Trichophyton rubrum (16/123, 13%) and Trichophyton verrucosum (5/123, 4%).

**Conclusion:** Trichophyton mentagrophytes was the predominant species isolated (47.96%) in all positive samples followed by Trichophyton tonsurans (43%). This study gives an insight about the etiological agents of dermatophytosis in this part of India. This data also helps in assessment of the prevalence and etiological profile of dermatophytosis.

#### OP21.

## Gray scale and Colour Doppler evaluation of extracranial carotid artery in patients at risk of developing cerebrovascular disease: A clinical and radiological correlation

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**Background:** Stroke is considered as one of the leading cause of mortality in adult population specially in those over 50 years of age. Hence the main indication for carotid doppler study is in prevention of stroke or cerebrovascular accidents and reduce the human burden of the disease. Carotid doppler sonographic examination is a sensitive tool for detection as well as characterisation of a plaque in the form of plaque extent and severity of lumen occlusion. Sonography being a sensitive and low cost modality along with having an advantage of providing patient comfort is the imaging modality of choice for carotid artery evaluation.

**Objectives:** To evaluate intima-media thickness, plaque morphology, criteria for grading stenosis and haemodynamic changes occurring in the carotid arteries in patients at risk of developing stroke.

**Methodology:** A prospective study of colour doppler in carotid arteries was done in 60 patients with risk factors for developing stroke. A detailed clinical history was obtained before the evaluation. Gray scale and doppler findings were obtained and correlated with the various risk factors.

Results: In our study the commonest finding was that of an atherosclerotic plaque which was more common in male patients (51%) as compared to the female population. Highest incidence was seen in males over 65 years of age. Cigarette smoking was found to be the commonest risk factor (67%) for causing cerebrovascular accidents. Slight predominance of atheromatous plaque formation was seen in the right sided carotids (53%). Commonest site of plaque formation was seen to be within the carotid bulb (37%). Significant stenosis was found in only 1 patient. 40% patients showed positive family history of CVAs. Echogenic plaques were seen in 12 patients, calcific in 9, hypoechoic plaques in 15 patients and 6 showed heterogenous plaque. Ulcerated plaque was seen only in one patient.

**Conclusion:** Gray scale and Dopplerevaluation of the carotid system can assess the prognosis in asymptomatic patients who are at risk of stroke development.

#### OP22.

### PREVALENCE OF CANDIDAEMIA IN SUSPECTED NEONATES ADMITTED TO NICU OF A TERTIARY CARE HOSPITAL, JAIPUR.

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**PURPOSE**: Blood stream infections are very comm. on in the paediatric age group and these are one of the common causes of morbidity and mortality in neonates and children. Candida species are one of the most common causes of BSI among neonates and account for 9-13% of such infections. Speciation and AFS is necessary to assess the increasing resistance to azole group of Anti fungal drugs. OBJECTIVES: To know the Prevalence of Candidemia in suspected neonates admitted to NICU and also to determine their Anti-Fungal susceptibility Patterns.

MATERIALS AND METHODS: We processed 50 Blood samples of the Neonates from NICU of NIMS Medical College and Hospital between January to May 2017. Samples were collected in BACTEC PEDS PLUS vials with all aseptic precautions. The vials were placed in the BACTEC 9050 and cultured. The positive vials were further plated on BA, MacConkey Agar, SDA and CHROM Agar looked for the growth and identified by necessary biochemical reactions and antifungal susceptibility was done by Disc diffusion method using Muller-Hinton Agar supplemented with 2% glucose and methylene blue(5mg/ml).

**RESULT:** Out of 50 blood samples 05(10%) Samples yielded Candida spp. These 05 samples were further processed and we got 02(40%) Candida albicans spp and 03(60%) yielded Non-albicans Candida spp. NAC were further differentiated as Candida parapsilosis-02(66.6%) and Candida tropicalis 01(33.3%). AFS pattern of Candida species revealed 60%, 80% and 100% sensitive to Fluconazole, itraconazole and Amphotericin B respectively.

**CONCLUSION:** Our study showed us the growing trend of Prevalence of Non-albicans Candida and also these showing increasing resistance to Azole group of Anti Fungal drugs. Hence there is great deal to differenciate and speciate every Candida isolated from blood culture.

## OP23. Knowledge and Awareness about HIV and AIDS Among First Year M.B.B.S Students

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**Background:** Acquired immunodeficiency syndrome (AIDS) caused by human immunodeficiency virus (HIV) is a major public health problem in India. Young people are much more prone to HIV infection as a result of a lack of correct health information, changing lifestyles and indulgence in risky behaviours. Increasing knowledge of HIV/AIDS can be a powerful means of fostering positive attitudes and building safe practices among populations.

**Objectives:** The objective of this study was to assess the extent of knowledge and attitude about HIV/AIDS among first year medical students of S.M.S. Medical College, Jaipur Rajasthan

**Methodology:** This was a cross-sectional study conducted on First year M.B.B.S students. A predesigned self administered questionnaire was circulated among students after taking informed consent. The questionnaire was focused on various methods of transmission, high risk behaviours, preventative measures and their attitude towards HIV positive patients. Descriptive statistics was used for analyzing data.

**Results:** A total of 240 medical students participated in this study. The age of participants ranged from 18 to 22 years. They get knowledge about HIV through television and internet. Majority gave correct responses for sexual route of transmission and by blood transfusion. About mother to child transmission, 72.3% responded that the transmission is in-utero and only 65.2% realized the transmission through breast milk. They also have misconception about transmission through mosquitoes. They had knowledge that HIV infection can be prevented by condaom. Majority have a negative attitude towards HIV positive patients.

**Conclusion:** The surveyed students had good knowledge about transmission and prevention about HIV/AIDS. This study highlighted some misconceptions about HIV transmission and intolerant attitude about people living with HIV, which need to be addressed.

#### OP24.

## COMPARISON OF A RAPID SEMI-QUANTITATIVE CARD METHOD AGAINST QUANTITATIVE TURBIDIMETRIC IMMUNOASSAY METHOD FOR MEASUREMENT OF CRP

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Pramukhswami Medical College, Karamsad

**Background:** Serum C-Reactive Protein (CRP) is an acute phase marker in humans that is useful for the diagnosis and monitoring of inflammatory disease. CRP measurement also helps in differential diagnosis, in the management of neonatal septicemia and meningitis where standard microbiological investigations are very much time consuming. Rapid and reliable method (an automated turbidimetric immunoassay ) are preferable for routine evaluation of human serum CRP levels. Using such expensive methods in health centres in rural areas is not possible.

**Objectives:** To evaluate whether human CRP levels could be measured by rapid method and confirmed by reliable method (an automated turbidimetric immunoassay) (TIA).

**Methodology:** The study included 100 participants, who attended Shree Krishna Hospital, Karamsad, whose CRP levels were done by Immunoturbidimetry method in Siemens Dimension Clinical Chemistry Analyzer, RxL and Xpand and compared by Latex Agglutination Card method. We used SPSS for data analysis.

**Results:** In our study, 100 participants (79 have high CRP levels (>0.3 mg/dl) and 21 participants have normal CRP levels by Immunoturbidimetry method whereas 66 have high CRP levels (>0.6 mg/dl) and 34 have normal CRP levels by Latex Agglutination method.) The correlation was strongly positive between two methods with (r = 0.985, P-value <0.0001). The sensitivity of the latex agglutination method was only 71.4% in comparison to the immunoturbidimetry (100%) but specificity of both the methods were equal (100%).

**Conclusion:** Serum CRP levels can be measured reliably using the immunoturbidimetry, but it is expensive so we can use Latex Card method in rural areas for primary diagnosis only.

#### OP25.

### A STUDY OF KNOWLEDGE AND BEHAVIOUR REGARDING BLOOD DONATION AMONG MEDICAL COLLEGE STUDENTS OF AJMER, (RAJASTHAN)

Sharma RK, Department of Community Medicine, J.L.N. Medical College, AJMER

**Background:** Blood is the most donated tissue in medical practice and a veritable tool in many live-saving situations when used judiciously. Blood donation is the only way of acquiring blood to meet emergency requirements in cases of road traffic accidents, complications of pregnancy and childbirth, various anaemic disorders and surgical emergencies among others.

**Objectives:** To assess the knowledge and behaviour regarding blood donation among medical college students

**Methodology:** A cross-sectional study was conducted in December 2016 among 123, 1st prof MBBS students of J.L.N. Medical College and Hospital, Ajmer (Rajasthan). A well-structured, pretested questionnaire was used to assess the knowledge and behaviour toward blood donation on the study subjects.

**Results:** The study sample consisted of 61 (49.59%) females and 62(50.40%) males. Majority of study participants belonged to 18 years 68(55.28%) age group. Minimum participants 5 (4.06%) were 17 year of age. 96(78.04%) study subjects were knows blood group "O" is a universal donor, 94(76.42%) were know blood group "AB" is universal recipient, 98 (79.67%) were know 45 kg is minimum weight to donate blood, 101 (82.11%) were know after 90 days blood can be donate if donated once, least knowledge 41(33.33%) were about 350 ml. Out of 123 study subjects only 17(13.82%) were ever donated blood. Out of 17 who ever donated blood 14(82.35) were male. In the present study shows that majority of study subjects 48(45.28%) not donate due to afraid of procedure. Study shows the main source of information regarding blood donation was television 52.03%.

**Conclusion:** Knowledge regarding blood donation among study subjects were good whereas initiation of blood donation is very low. Role of health care personnel and medical students of a medical college for blood donation are pivotal. They should lead the example of blood donation on the 14 June world blood donor day and 17 April World Haemophilia Day along with social mobilisation.

#### OP26.

### Management of Biomedical waste among health care workers at Jawahar Lal Nehru Medical College and Hospital Ajmer

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**Background:** Wastes generated within the hospital are termed as Biomedical wastes (BMWs). Hospital generates waste which is hazardous for environment, people and health care workers, who handle these wastes poses a threat to public health and environment.. Hospital is one of the complex institutions where people visit frequently. So it is necessary that health care workers are aware of the dangers caused by BMWs. This study is done to assess the knowledge, attitude and practice regarding bio medical waste management among the health care workers. Proper disposable of bio medical waste is mandatory for eco-friendly environment and public health.

**Aims and Objectives:** To assess the Knowledge, Attitude and Practice on Biomedical waste management among Doctor (intern), Nursing staff, Lab technicians and sanitary staff.

**Materials and Methods:** A cross sectional study was conducted in Jawahar Lal Nehru medical college and hospital, Ajmer, Rajasthan. Among 137 health care workers, this included doctors (intern), nursing staff, lab technicians and sanitary staff. A pretested questionnaire was used for data collection to assess their knowledge, attitude, practice regarding bio medical waste management by interview method.

**Results:** In the present study out of 137 healthcare workers. 86 (62.77%) male and 51(37.22%) female were participated. Mainly 33 (24.08%) intern doctors, 72 (52.55%) nursing staff, 11 (8.02%) laboratory technicians and 21 (15.32%) sanitary staff were participated. More than 90% of the study participants believed that proper disposal of biomedical waste that was generated by them was part of their responsibility. 6.06%, 5.55%, 9.09% and 19.09 of doctors (intern), nursing staff, lab technicians and sanitary staff respectively had needle stick injuries but only sanitary staff had not reported it to seniors.

**Conclusion**: This study showed, doctors (intern), nursing staff having better knowledge, attitude and practices than lab technicians and very poor knowledge, attitude and practices among sanitary staff regarding biomedical waste management. As there was history of multiple needle stick injuries among sanitary staff it is imperative to provide them personal protective gear like mask, gloves and shoes and educate them to use it and report immediately to their seniors in case of any injury.

### OP27. Assessment of fluoride status in patients with hypothyroidism

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Pt. B.D. Sharma PGIMS, Rohtak

**Background:** Fluorosis an endemic problem affects many tissues including endocrine glands such as thyroid. Few studies have reported no relationship between serum fluoride levels and thyroid disorders, while others have reported decreased serum thyroid hormone levels are associated with increased fluoride levels in hypothyroidism.

**Objective:** To assess the fluoride status in the patients of hypothyroidism and healthy controls and to correlate the fluoride status with the severity of hypothyroidism.

**Methodology:** The present study was conducted in the Department of Biochemistry in collaboration with Department of Medicine (Endocrinology), Pt. B.D. Sharma PGIMS, Rohtak. Fifty newly diagnosed patients with hypothyroidism in the age group 20-55 years and fifty age and sex matched healthy controls were taken in the study. Fasting venous blood samples were collected from cases and controls for routine biochemical, hormone analysis and fluoride estimation after obtaining informed written consent and complete history.

**Results:** Mean water fluoride level of cases was  $2.308 \pm 0.282$  ppm [Mean  $\pm$  SE] and of controls was  $1.659 \pm 0.183$  ppm and found to be statistically significant. Mean value of serum fluoride levels in study group was  $0.234 \pm 0.023$ ppm and of controls was  $0.058 \pm 0.007$ ppm and found to be statistically significant. Mean urine fluoride level of cases was  $2.359 \pm 0.146$  ppm and of controls was  $1.577 \pm 0.166$  ppm and found to be statistically significant. TSH in the study group ( $20.924 \pm 2.398$ ) and control group ( $2.817 \pm 0.186$ ) were compared and found to be statistically significant.

**Conclusion:** It is evident in consistent with the findings of reported studies that analysis of fluoride in body fluids besides drinking water is highly relevant & necessary for understanding & prevention of potential health implications like hypothyroidism seen in endemic areas.

#### **OP28.**

#### Study of Functional Disturbance in liver and pancreas after thermal injury

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**Background:** After burn injury various metabolic and functional changes occur in body. The pathophysiological changes resulting from thermal injury exacerbate the whole body inflammatory response and may cause organ dysfunction.

**Objectives:** To determine the functional disturbances in liver and pancreas by assessing relevant biochemical parameters.

**Methodology:** The study was done by involving 300 patients admitted in the hospital with burn injuries and 150 clinically normal healthy persons as control group. Alkaline Phosphatase (ALP), Amylase, Transaminase (AST,ALT) were measured on XL-640 fully-auto biochemical analyser in the laboratory. Serum AST and ALT were measured by IFCC kinetic method. ALP was measured by Modified IFCC Kinetic method. Serum amylase was estimated by modified amyloclastic method.

**Results:** Transaminase values increased till 5th day then declined on 10th day, while alkaline phosphatase and amylase activities continued to rise till 10th day.

**Conclusion:** From this study, we were able to conclude that monitoring serum enzymes level specifically serum ALP and serum amylase in post-burn period has valuable prognostic importance.

#### OP29. Hirayama's Disease - A Rare Case

Verma Y.N., ChoudharyS, Dep. of Medicine, GMCH, Udaipur

**Background:** Hirayama's disease is a rare benign disorder, also referred to as monomelic amyotrophy (MMA), Juvenile non progressive amyotrophy, Sobue disease. It is a focal, lower motor neuron type of disease. Mainly young males in their second and third decades of age are most commonly affected. It is seen most commonly in Asian countries like India and Japan. In majority of people cause of this disease is unknown. MRI of cervical spine in flexion will reveal the cardinal features of Hirayama disease.

Case Report: A 26 year gentleman came with a history of insidious onset of weakness in both the hands begenning with left side followed by right of 4 years duration. On examination he had clawing of both hands with wasting of forearm muscles. Lower limbs had no abnormality with normal deep tendon reflexes. MRI showed thinning of cord from C4 to C7 level suggestive of cord atrophy. Based on these features a diagnosis of focal amyotrophy was made. A cervical collar was prescribed and patient is under regular follow up.

**Conclusion:** Hirayama disease is a rare self-limiting disease. Early diagnosis is necessary as the use of a simple cervical collar which will prevent neck flexion, has been shown to stop the progression.

### OP30. Comparison of Anti-TPO and TSH in Diabetes Mellitus

Mehta S, Department of Biochemistry GMCH, Udaipur

**Background:** Altered thyroid hormones have been described in patients with diabetes mellitus especially those with poor glycemic control. Both thyroid and diabetes mellitus are autoimmune disorders. Anti-TPO (antibody) supposed to increase in autoimmune disorders and on the other hand TSH is measured conventionally to evaluate thyroid dysfunction.

**Objectives:** To evaluate thyroid dysfunction in diabetes mellitus by measuring serum TSH & Anti-TPO (antibody) and to evaluate the levels of anti thyroperoxidase (TPO) detected by highly sensitive chemiluminence method in diabetic patients without evidence of clinical thyroid disease.

**Methodology:** The present case control observational study was conducted in the Department of Biochemistry in collaboration with Department of Medicine (Endocrinology), Geetanjali medical college and hospital Udaipur. The Study group consisted of 200 confirmed diabetic cases. Controls consisted of 200 Non- diabetic cases (health check up data). For this TSH was measured by ECLIA on Cobas 6000(Roche), Anti-TPO on chemiluminisense and glucose was measured by Spectrophotometry on Cobas 6000(Roche). Fasting venous blood samples were collected from cases and controls for routine biochemical, hormone analysis after obtaining informed written consent and complete history.

**Results:** We have observed that serum anti-TPO was positive for 24 cases and was negative for all the controls. Serum TSH was abnormal in 50% of positive Anti-TPO cases.

**Conclusion:** Serum TSH is more sensitive in detecting thyroid abnormalities in diabetes mellitus. The prescence of Anti-TPO antibodies may be an early marker for thyroid disease. Therefore patients with positive antibodies should be monitored by serum TSH at regular intervals.

#### OP31.

#### Study of thyroid dysfunction in patients with type 2 Diabetes mellitus

Chaudhari R , Dept. of Medicine, GMCH, Udaipur

**Background:** Thyroid dysfunction is very well known in type 1 DM where it is due to autoimmunity. Recently few studies have shown that thyroid dysfunction, especially hypothyroidism is found in patients with type 2 DM but the mechanism for this is largely unknown.

**Objectives:** -To study the pattern of thyroid dysfunction in patients with type 2 Diabetes mellitus.

Methods: 60 patients with Type 2 DM who were diagnosed on the basis of ADA criteria were included in the study group and 47 in control group.

**Results:** 70% of the study group had normal TSH values, while 7% had low readings and 23% high. In the control group, 92% were normal, 2% low and 6% high. There was no statistical difference when the whole group was considered. When comparing low, normal and high subgroups, the difference between the study group and control group was statistically very significant (p-value 0.001). the TSH had no correlation with duration of diabetes or the level of control of diabetes.

**Conclusion:** Diabetic subjects are more prone to have thyroid dysfunction than non-diabetics. The thyroid dysfunction in diabetics is more likely to be hypothyroidism (14 out of 60) than hyperthyroidism (4 out of 60).

#### OP32.

## A STUDY OF CLINICAL PROFILE OF 50 PATIENT WITH PORTAL HYPERTENSION AND TO EVALUATE ROLE OF NONINVASIVE PREDICTOR OF ESOPHAGEAL VARICES

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#### **Background:**

A major cause of PTH related morbidity and mortility is the development of variceal heamorrhage, which is diagnosed by endoscoy. In order to reduce the increasing burden that endoscopy unit will have to bear. In In this study we have used the platelet count and spleen diameter ratio as a noninvasive predictive parameter.

#### **Objectives:**

- To study clinical and investigative profile of selective patients of PHT.
- To study the predictive power of noninvasive investigative parameters for detection of esophageal varices in patients with PHT as compared to invasive parameter.
- To discuss the etiopathogenesiss of PHT.

#### Methods:

50 patients with PHT, between Jan 2016 to August 2016, were studied.

#### Results:

- Male preponderance (M:F=2.1:1), with mean age of 41 yrs.
- There was significant correlation between platelet count and esophageal varices.
- 80%(32/40)patients with varices had spleen size>120mm. 40%(5/11)with normal spleen size had no varices.

#### **Conclusion:**

Portal hypertention is largely a preventable condition because the commonest etiology is alcohalism. Asymptomatic esophageal varices, which is quite common can be easily diagnosed with invasive endoscopy. Otherwise suspected with noninvasive platelet/spleen size ratio in country like ours, where financial constraint is a main problem.

#### OP33.

### STUDY OF CLINICAL PROFILE OF HYPONATREMIA IN ELDERLY PATIENTS IN A TERTIARY CARE HOSPITAL IN SOUTHEN PART OF RAJASTHAN

Chaudhari A, Kumawat D.C., Dept. Of Medicine, GMCH, Udaipur

#### **Background:**

Hyponatremia is the most common electrolyte disorder among hospitalized patients and has been associated with increase mortality. Hyponatremia occurs in a broad spectrum of patients who are asymptomatic or critically ill. Hyponatremia is defined as a serum sodium concentration < 135 mEq/L.

#### **Objectives:**

- To study neurological manifestations in elderly hospitalized patients.
- To know the etiology and outcome of hyponatremia in hospitalized elderly.

#### Methods:

100 elderly hospitalized patients with hyponatremia were included in study, these patients were investigated as per protocol and were treated as per standard regimen.

#### Results:

100 patients with symptomatic hyponatremia were studied. The CNS symptoms included drowsiness, lethargy, confusion, seizures and coma. There was female preponderance of cases (55%). The common comorbid conditions were hypertension (69%) and DM(51%). Females tolerated hyponatremia better than male with mortality of 9.09% and 33.33% in respectively (p=0.0026). most common cause of hyponatremia was SIADH (30) and drugs (24) of which diuretics are most common.

#### **Conclusion:**

Hyponatremia was more common in females and they seemed to better tolerate it than their male counterparts. Diuretics should be used with caution in elderly.

# ABSTRACTS FOR POSTER

#### PP1.

### ASSESSMENT OF VACCINE WASTAGE AT URBAN HEALTH TERTIARY CENTRE, RNT MEDICAL COLLEGE, UDAIPUR

Joshi SM, Dept. of PSM, RNT Medical College, Udaipur

**Background:** India has one of the largest Universal Immunization programme (UIP) in the world. WHO reports over 50% vaccine wastage around the world.

**Objectives:** This study was conducted to assess the amount of vaccine wastage and how it differs with route of administration & type of different vaccines.

**Methodology:** This is a record based study carried out at Immunization clinic, UHTC, RNT Medical College, Udaipur, Rajasthan for reference period from 1st January 2016 to 31st December 2016.

**Results:** Among individual vaccine wastage rate was highest (48.1%) in DPT and lowest (14.1%) in OPV. The wastage rate in 10 dose vial was highest (44.79%) and lowest was (14.1%) in 20 doses vials.

**Conclusion:** Vaccine wastage rate can be obtained by actual monitoring of immunization centre. This can save significant funds for a immunization programme, if wastage can be reduced without affecting coverage.

#### PP2.

## A STUDY ON SERUM ZINC AND MAGNESIUM STATUS WITH GLYCATED HEMOGLOBIN OF TYPE 2 DIABETES MELLITUS PATIENTS AMONG ROHILKHAND POPULATION

Rai S, Dept. of Biochemistry, Rohilkhand Medical College, Bareilly.

**Background:** Diabetes mellitus is a clinical syndrome characterized by hyperglycemia caused by absolute or relative deficiency of insulin. Zinc has a role in the regulation of insulin production and glucose utilization through muscles and fat cell.

**Objectives:** To study the association between serum Zinc & Magnesium levels with HbA1C in patients with type 2 diabetes mellitus.

**Methodology:** A case control study was carried out on patients attending OPD and IPD, Department of Medicine, RMCH. 70 diagnosed cases of type-II DM is taken and compared with 70 gender and age matched healthy controls. The study was conducted from 1stJune 2016 to 31st May 2017. Ethical clearance was obtained from Institutional ethical committee. Data is expressed as mean  $\pm$  S.D. Student's test "t" is used to compare cases from control. P value of <0.05 is considered significant.

**Result:** Mean  $\pm$  SD of serum Zn is  $67.81\pm21.04~\mu g/dL$  in Type II DM and in control  $82.65\pm18.92~\mu g/dL$ . 'P' value is 0.00 when compared between the two. Mean  $\pm$ SD of Serum Mg is  $0.89\pm0.44~m Eq/L$  in Type II DM and in control  $1.84\pm0.44~m Eq/L$ . 'P'value is 0.00 when compared between two.

**Conclusion:** The result suggests that serum zinc and magnesium varies significantly in Type II DM from control that signifies a definitive role of zinc and magnesium in glucose homeostasis.

#### PP3.

Association between Serum Fetuin-A and Vascular Endothelial Growth Factor (VEGF) levels in Patients with Newly Diagnosed Type 2 Diabetes Mellitus.

Dharambir, Dept. of Biochemistry, S. G. T. Medical College Collage, Gurugoan

**Background:** Fetuin-A is a multifunctional glycoprotein produced by hepatic cell, is an endogenous inhibitor of insulin receptor tyrosin kinase in the liver and muscle leading to insulin resistance. Moreover, in addition to inducing insulin resistance, fetuin-A has also been-shown to have pre-inflammatory effects and influences vascular cell growth and produce angiogenic protein. Vascular endothelial growth factor (VEGF) is a well known marker for angiogenesis which affects both vascularisation and innervations of the pancreatic islets cells. It's over expression contributes to ?-cell injury, micro vascular failure and consequential diabetes mellitus.

**Aim:** The aim of this study is to investigate the relationship between serum fetuin-A and serum vascular endothelial growth factor (VEGF) levels in patients with newly diagnosed type 2 diabetes mellitus.

**Methodology:** The present study included 100 cases and 100 age matched healthy controls, visiting medical outpatient department of SGT Medical College and Hospital, Budhera, Gurugram, Haryana. Samples were analysed for the measurement of fasting plasma glucose (FPG), postprandial blood glucose (PPBG), lipid profile, HbA1c and Serum Fetuin-A and Vascular endothelial growth factor (VEGF) (by ELISA).

**Result:** In our study, there was a significant positive correlation between fetuin-A concentration and serum VEGF levels (r= 0.465,p<0.001). In addition our study finding also shows that both fetuin-A and VEGF are positively associated with fasting plasma glucose (FPG), HbA1c and Total cholesterol (TC) and Triglycerides (TG).

**Conclusion:** The present study might provide important information that the positive association between fetuin-A and VEGF may be involved in the development and pathogenesis of type 2 diabetes mellitus. Further investigations to evaluate the relationship between these two parameters in diabetic patients are required.

### Sexual Dimorphism and Regional Difference in sacral index of Human sacrum: A Morphometric study in North India

Singh H, Dept of Anatomy FMHS, SGT University, Gurugram.

**Background:** Sacrum is a large triangular bone. It is formed by fusion of five sacral vertebrae and forms the caudal region of the vertebral column. It forms posterior superior wall of the pelvic cavity wedged between the two hip bones. Sacrum is often considered to be an important bone while dealing with sex differences in skeletal material, there is paucity of metrical data available for this bone.

**Objectives:** To study morphometric data of male and female sacrum from North Indian Population for sexual dimorphism.

**Methodology:** The present study was performed on 102 dry adult human sacrum of known sex, collected from Department of Anatomy, FMHS, SGT University, Gurugram and Department of Anatomy, Pt.B.D.Sharma, PGIMS, Rohtak. Mid ventral straight length and width of sacrum were measured and Sacral index (SI) was calculated from the measured parameters.

**Results:** The mean values of sacrum for mid ventral straight length was found to be 113.81 mm in male and 98.07mm in female, width of sacrum was 111.08mm in male and 107.21mm in female and Sacral index was 97.64mm in male and 109.90mm in female.

**Conclusion:** It is evident from the present study that sacral index is more significant in identification of female sacrum (39.21).

#### Rare pediatric case presentation - solitary fibrous tumor of lung

Kumar A, Singh K, Gupta M.L , Mogra N. Dept. of Pathology, GMCH, Udaipur

**BACKGROUND:** Solitary fibrous tumors (SFTs) are classified as fibroblastic-mesenchymal tumors .less than 2% of all soft tissue tumors are SFTs of which only one third are extra pleural.

**CASE REPOT:** A 11 years old male presented with gradual onset of right sided lower chest pain, fever, dyspnea, cough from & weight loss. Grossly, right lung mass was measuring 16X11X9 cm with dark and brown & multiple fibrinofibrous adhesion on external surface. Microscopic mass shows features of SFTs, confirmed on IHC staining reveling positive for Vimentin, CD 34, and CD10.

**DISCUSSION:** It's challenging to diagnose SFTs of chest wall due to rare presentation. Precise microscopy and Immunohistochemistry analysis are essential to diagnose Solitary fibrous tumors.

### A CASE OF PDA WITH INFECTIVE ENDOCARDITIS COMPLICATED WITH SPLENIC ABSCESS

Kanabar V, Dept of General Medicine, GMCH, Udaipur

**Objectives:** To study the case of PDA with Infective Endocarditis complicated by Splenic Abscess.

**Methodology:** A 24 year old female, known case of PDA, presented with complaint of fever since 6 months and dry cough of acute onset. She also had history of weight loss and decreased appetite. In view of clinical finding of splenomegaly, Ultrasonography of whole abdomen was done which showed multiple splenic microabscesses. She had already been treated with anti tubercular therapy and antimalarials from outside. Echocardiogram showed evidence of endocarditis. Blood culture growth demonstrated staphalococcus hominis. Results: Patient was treated with antibiotics for one month with improvement in clinical, radiological and laboratory profile.

**Conclusion:** Splenic abscess is a rare complication of infective endocarditis which itself is a complication of PDA. Often it is difficult to treat such cases by medical management alone which was achieved in this case. Rapid diagnosis and treatment are essential as it's course can be fatal. This case presents unique profile of the disease.

## CASE OF AN ATYPICAL FORM OF RENAL FAILURE : GRANULOMATOUS INTERSTITIAL NEPHRITIS.

KATHURIA V, Dept of General Medicine, GMCH, Udaipur

**Aim:** To study the case of Granulomatous Iinterstial Nephritis with left lower lobe lung cystic bronchiectasis and known case of diabetes mellitus and hypertension.

**Methodology:** A 55 year old female , known case of diabetes mellitus and hypertension , presented with complaint of fever, generalised bodyache, swelling all over body, itching, decrease urine output since 7 days. In view of clinical finding of edema and abdominal(flanks) tenderness, Ultrasonography KUB was done which showed renal parenchymal disease grade II with renal cortical cysts . Blood investigations showed derranged CBC (COMPLETE BLOOD COUNT), KFT(KIDNEY FUNCTION TEST), COMPLEMENT 3, COMPLEMENT 4. Urinalysis suggestive of UTI. Renal biopsy revealed Granulomatous Interstial Nephritis.

**Results**: Patient was treated with antibiotics, corticosteriods, diuretics and showed improvement in renal function.

**Conclusion**: Granulomatous Interstial Nephritis patients present as clinical picture of AKI and RPRF and improves with antibiotics, corticosteroid and diuretics treatment. Rapid diagnosis and treatment are essential as its course can be fatal. This case presents an atypical form of renal failure.

## A CASE OF HOFFMAN'S SYNDROME: A RARE NEUROLOGICAL PRESENTATION OF HYPOTHYROIDISM.

#### ALWANI M, Dept of General Medicine

**Aims:** To study the case of hoffman's syndrome: A rare neurological presentation of hypothyroidism

**Methodology:** A thirty year old male, presented with complaint of hoarseness of voice, joint pain stiffness and swelling, facial puffiness, weakness and cramps in bilateral lowerlimb since 2-3 months acute onset. In view of clinical finding of hyporeflexia, calf muscle hypertrophy, neck swelling. Ultrasonography of thyroid gland was done which showed few subcentrimetric sized bilateral lymphnodes and bilateral lobes of thyroid had heteroechoic echotexture with tiny cyst and foci. Laboratory investigations revealed derranged thyroid function test and CPK NAC. EMG(ELECTROMYOGRAPHY) AND NCS(NERVE CONDUCTION STUDY) showed no significant abnormality. He has been treated with antithyroid drugs.

**Results:** Patient was treated with anti thyroid drugs with improvement in clinical, and laboratory profile.

**Conclusion:** Hoffmann's syndrome is a rare complication of hypothyroidism. Such cases treated by medical management alone which was achieved in this case. Rapid diagnosis and treatment are essential as it's course can be fatal. This case presents unique profile of the disease.

# Association of Serum Homocysteine Level with ocular Involvement in Behçet's Disease

Bhasin V, Karunanand B, Bansal SK, Arora P, Halder D, Chandrakar N

**Background:** Behçet's disease is a chronic, multisystemic disease of unknown etiology in which eye involvement is the most common cause of morbidity.

**Objective:** To investigate the possible relation between Serum Homocysteine Level and

ocular Involvement in Behçet's Disease in Indian population

Study design: Prospective, Observational study

**Methods:** Fifty patients who fulfilled the criteria of the International Study Group for Behçet's disease (32 females and 18 males) were enrolled. All the patients were evaluated carefully by an experienced ophthalmologist for the diagnosis of ocular involvement. Serum homocysteine, vitamin B12, and folate levels were determined. The patients were categorized according to the presence or absence of uveitis. The data were statistically analyzed by using Student's t-test and P values < 0.05 were considered statistically significant.

**Results:** Nineteen patients (38%) had eye involvement, which included anterior uveitis, vitritis, macular damage, optic atrophy, panuveitis, posterior uveitis, retinal vasculitis, and retinal hemorrhage. Serum levels of folate and vitamin B12 were comparable in patients with Behçet's disease. There was no significant correlation between serum homocysteine level in patients with and without eye involvement.

**Conclusion:** Our findings suggest that homocysteine level does not have significant effect on eye involvement in patients with Behçet's disease.

# A CASE OF LONG QT INTERVAL WITH KNOWN CASE OF HYPOTHYROIDISM DIAGNOSED AS A PRIMARY HYPOPARATHYRODISM RELATED COMPLICATION.

Gandhi AP, Dept of General Medicine, GMCH, Udaipur.

## **Abstract Body:**

Hypoparathyrodism is a rare endocrine disease. It can cause by accidental surgical removal of parathyroid gland during large goitre excision. That can lead to complication of hypoparathrodism. We report a case of 30 yr old female presented with complains of generalised weakness, giddiness, numbness over fingers and toes. She was having bradycardia .So, she was evaluated for that. her ecg was having pronged QT interval(corrected)0.64. So, she was evaluated by blood investigations and was having low levels of calcium and parathyroid hormone. She was treated for her complication and she was improved both clinically and laboratory profile. this case presents unique presentation of diasease.

# PP12 A CASE OF ADULT ONSET STILL'S DISEASE

Vadhadia P,
Department of General Medicine, GMCH, Udaipur.

# **Abstract Body:**

Adult onset still's disease(AOSD) is a rare form of systemic auto-inflammatory condition. We report a case of 33 year old male presented with complaints of fever, joint pain, generalised erythema with itching and pain abdomen. lab investigations were significant for high ferritin, CRP, ESR and leucocytosis with negative RA and ANA levels. Ultrasonography of abdomen showed hepatomegaly. CT neck showed cervical lymphadenopathy. Blood culture was sterile. He had already been treated with multiple broad spectrum antibiotics and antimalarials from outside. Patient was put on oral steroids and DMARD's which resulted in improvement in clinical and laboratory profile. Diagnosis of AOSD was reached after ruling out other infections. This case presents unique profile of this disease.

# A Case of Hypogonadotropic Hypogonadism (Kallmann's Syndrome)

Lapsiwala Y, Department of General Medicine, GMCH, Udaipur.

## **Abstract Body:**

A 20 year old male, presented with complains of failure to have secondary sexual characteristics like growth of hair on beard and moustache, change of voice, etc. On examination, he was having very small sized testes, small sized penis and very sparse pubic and axillaries hair with normal height and body weight for age. On investigations, he was found to have very low serum testosterone with nil serum FSH and LH. His semen analysis showed azoospermia. Other Pituitary hormone levels like TSH, Prolactin, and ACTH were within normal limits. His genetic study revealed normal 46 XY Karyotype. Thus this was a case of Hypogonadotropic Hypogonadism. On further interrogation patient also agreed to have some degree of altered smell sensations. This is a case of Kallmann's Syndrome.

Kallmann's Syndrome is isolated deficiency of pituitary gonadotropins(FSH and LH) due to impairment of hypothalamus to release GnRH associated with poor development of olfactory bulb in the nose. It occurs due to some genetic mutations and is more common in males than females.

# A rare case report: WEIL'S DISEASE WITH HEPATITIS A WITH MENINGITIS

Bagara SS, Dept. Medicine, GMCH, Udaipur

#### Abstract:

A 30 year old female, presented with complaints of relapsing fever, pain abdomen, nausea, vomiting from last one month and altered sensorium from last 2 days. On examination icterus and hepatospleenomegaly was present. She was admitted in ICU and was evaluated thoroughly. On the second day of ICU admission she developed one episode of GTCS. She was started on antibiotics and antimalarials on the ground of clinicI malaria. Her CBC, KFT and LFT were deranged. Hepatitis -A and leptospira IgM was found to be positive. MRI brain was done which showed meningeal enhancement ?meningitis.The patient continued to have fever and her sensorium did not improve significantly. Patient was then started on ceftriaxone, doxycycline and supportive therapy.

Patient improved gradually and was eventually shifted to the ward. Her symptoms reduced and she showed significant improvement on follow up.

## PP15.

# Comparative study between DHS and PFN in management of extracapsular neck of femur fracture

Rawat V, Department of orthopedics,
Dr. D.Y Patil Medical College and Hospital, Pune,

**Background:** Early restoration of joint motion, return to normal physiological function and minimal morbidity is now regarded as ideal fracture treatment. The extracapsular neck of femur fracture is one of the most common types of fractures that an orthopedic surgeon has to face during his everyday practice especially in geriatric population. Reduction in bone density is a strong risk for these fractures. The conservative approach has fallen into disrepute because of high complication rate.

**Objectives:** To compare DHS and PFN in management of extracapsular neck of femur fracture

**Methodology:** 50 patients diagnosed with extracapsular neck of femur fracture were treated using DHS in 25 patients and PFN in 25 patients.

**Result:** The study involved patients above 60 years of age. The average age was 70.87 years. Domestic fall and motor vehicular accidents were the mode of injury in all patients. Shortening in PFN group was 5.2mm as compared to 10.9mm in DHS group. In the DHS group the one month Harris hip score was less than that of the PFN group, however this difference disappeared with the two group on the sixth monthly and yearly follow up. There was 2% case of implant failure in PFN group and 4% implant failure in DHS group.

**Conclusion:** In very unstable fractures, PFN is superior to DHS in stability, elasticity of fixation, load sharing and early return to function with minimal operative trauma.

# PP16. DENGUE VIRUS POSITIVITY IN PEAK SUMMER AT JAIPUR

Jhajhria NS, Tiwari J, Vyas M, Sharma P, Nair RT, Deeba F, Malhotra B, Dept of Microbiology & Immunology, SMS Medical College, Jaipur

**Background:** Dengue is a major public-health concern throughout tropical and sub-tropical regions of the world. It is the most rapidly spreading mosquito-borne viral disease. Since 1996, dengue has been widely prevalent in India in reported from 18 state/union territories, placing more than 50 million people at risk. The morbidity and mortality rate of Dengue virus is alarming. In order to curtail and cure the disease the first and foremost step is the detection of Dengue.

**Objectives:** To detect Dengue virus positivity in peak summer at Jaipur

**Methodology:** The blood samples of Dengue suspected patients attending SMS Medical College and attached group of hospitals were collected and processed at DHR State Level VRDL. A total of 109 blood samples were collected and tested for Dengue IgM antibody ELISA (NIV MAC ELISA) during the period of March to May 2017.

**Results:** Out of 109 samples, 33 (30.27%) samples were found to be positive for IgM antibodies. Number of males was higher in suspected cases but IgM positivity was almost similar in both sex (Male 19/62, 30.65%; Female 14/47, 29.79%).

**Conclusions:** Even during the pre-monsoon period dengue IgM positivity was found to be significant so patients with dengue like illness should be screened for Dengue IgM antibodies during this period also.

## PP17.

# Asthma with OSA: A separate phenotype?

Garq S, Dept. of Medicine GMCH, Udaipur

**Bachground:** Both OSA & asthma control should be addressed simultaneously for the better outcome. So it is very important to understand the relationship between asthma and OSA and how important it is that OSA be considered, identified, and treated in patients with asthma.

**Objectives:** To evaluate the prevalence of high OSA risk in Asthmatic and to compare the risk of OSA with level of Asthma control

**Methodology:** 119 known cases of Asthma attending outpatient were enrolled. After obtaining detailed history, they were evaluated for level of Asthma control by GINA guidelines & STOP-BANG questionnaire for the evaluation of OSA risk. Patients were subjected to spirometry before and after bronchodilation. Observations were tabulated and analysed using Chi-Square Tests, ANOVA and Multivariate logistic regression models.

Results: High OSA risk was found in 26% of the patients of asthma. One way ANOVA showed High OSA risk is associated with increase in age(mean-49.48,p<0.001), Total duration of illness(16.52,p-0.002), BMI(29.04,p<0.001) & with decreased FEV1(83.68,p=0.024) and SPO2(95.81,p=0.001). Chi-square tests showed significant associations Of OSA with grade of dyspnoea (p<0.001), Night symptoms of asthma (p=0.02), Rhinitis(p=0.03), GERD(p=0.008) and smoking(p=0.023). OSA risk is increased with poor control of asthma (p<0.001,2-sided). On multivariate logistic regression models predicting high OSA risk, Poor asthma control(Sig-0.003), age(Sig-0.009) & BMI(sig-0.000) showed association with high OSA risk.

**Conclusion:** OSA risk is increased in asthmatic patients and OSA is an independent risk factor for poor asthma control. Risk of OSA in patients with asthma is predicted by level of asthma control, coexistent GERD, Rhinitis, Duration of illness and smoking. STOP-BANG questionnaire may serve as an effective screening tool in poorly controlled asthma for identifying high OSA risk, in whom polysomnography may be considered for definitive

# ANAPLASTIC PLEOMORPHIC XANTHOASTROCYTOMA OF THE BRAIN- A CASE REPORT

Sharma K, Rai NN, Pathak V, SukhijaD Govt. Medical College, Kota

**Objective:** Pleomorphic xanthoastrocytoma has been considered as an astrocytic tumor with relatively favourable prognosis, corresponds to WHO Grade-II neoplasm. Recently, several patterns with relatively poor prognosis have been recorded and a new concept of "PXA with anaplastic features" has been proposed which is included in WHO Grade-III due to presence of recurrence, Haemorrhage and necrosis. It typically present in later childhood or early adulthood and show a predilection for the cerebral hemispheres, particularly the temporal lobes.

Case report: The present case is about a 20 year old female who presented with symptoms of severe headache, seizures and weakness. MRI revealed left frontoparietal convexity heterogenous enhancing mass with foci of haemorrhage, calcification and moderate perilesional oedema and mass effect. Clinical and radiological examination was suggestive of a high grade glial neoplasm. Craniotomy with debulking of tumor was performed and with the help of Histomorphological features and IHC a diagnosis of Anaplastic Pleomorphic Xanthoastrocytoma was made.

**Conclusion:** Thus a close follow up is required to detect any recurrence with malignant transformation in PXA. The rarity of this tumor demand neuropathological experience for correct diagnosis and to prevent harmful therapeutical decision.

# PP19 SQUAMOUS CELL CARCINOMA OF CLITORIS - A CASE REPORT.

Soni N, Saxena B, Tanwar R K, Rai NN, Saxena R, Government Medical College, Kota

**Objective:** Carcinoma of Clitoris is very rare and is important because of its aggressive nature and clinical course leading to early death. Cancer of vulva accounts to 4 % of all malignancies of female genital tract and 0.6% of all cancers in women. Here we present, this rare Carcinoma of Clitoris that was proved to be a squamous cell carcinoma.

**Case Report:** A 68 year old female presented to gynaecology outdoor with a clitoral growth involving adjacent vulva. CT scan showed involvement of clitoris, labia majora and inguinal lymph nodes. FNAC from the lesion followed by Biopsy proved a case of well - differentiated squamous cell carcinoma.

**Conclusion:** Clitoral Carcinoma is a tumour encountered in rarity. Management of such case is a challenge for the surgical oncologist, due to advanced stage at presentation. Hence, such lesions require early biopsy to avoid delay in diagnosis and further management of the case.

# A CORRELATIVE STUDY OF SERUM FERRITIN CONCENTRATION AND GLYCATED HEMOGLOBININ TYPE II DIABETES MELLITUS

## Mishra P,

Dept. of Biochemistry, Rohilkhand Medical College, Bareilly

**Background:** Diabetes Mellitus is one of the most prevalent endocrine disorders in the world. Although Type II DM is more common than Type I. Serum ferritin, an acute phase reactant is a marker of iron stores in the body. Ferritin can release iron if the blood has a low iron concentration, and it can help to store excess iron if the blood and tissues have a high iron concentration.

**Objectives:** To study the association between body iron store and diabetes mellitus by comparing serum ferritin and HbA1c levels.

**Methodology:** A case control study was carried out on patients attending OPD and IPD, Department of Medicine, RMCH. 70 diagnosed cases of type-II DM is taken and compared with 70 genders and age matched healthy controls. The study was conducted from 1st April 2016 to 31st March 2017. Ethical clearance was obtained from Institutional ethical committee. Data is expressed as mean  $\pm$  S.D. Student's test "t" is used to compare cases from control. P value of <0.05 is considered significant. The results are displayed with the help of the tables according to the aim and objective of the study.

**Result:** Mean  $\pm$  S.D. of Serum Ferritin is 214.16 $\pm$ 220.25 ng/ml in Type II DM and in control 95.64 $\pm$ 56.71ng/ml. 'P' value is 0.00 when compared between the two.

**Conclusion:** The result suggests that serum ferritin varies significantly in Type II DM control that signifies a definitive role of ferritin in glucose regulation.

# EVALUATION OF THE ROLE OF DIFFERENT BIOMARKERS IN ASSESSMENT OF NASH IN PRE DIABETIC AND DIABETIC PATIENTS WITH NAFLD

kumar A, Fiza B, Sinha M, Department of Biochemistry Mahatma Gandhi Medical College and Hospital, Jaipur.

**Background :** Nonalcoholic fatty liver disease (NAFLD) is one of the most common chronic liver disease in developing countries. NAFLD is strongly correlated with insulin-resistant states such as obesity, metabolic syndrome (MetS), and type 2 diabetes mellitus (T2DM). The study was conducted on patients visiting the Outpatient Department of Medicine and Gastroenterology of Mahatma Gandhi Medical College & Hospital, Jaipur.

**AIM :** in this study to Assess the association dyslipidemia with NASH prevalence in NAFLD in pre diabetic and diabetic patient .

**Material and method:** Pre diabetic (n=50) and type 2 diabetes mellitus (n=50) patients with NAFLD were enrolled for the study

**Result:** Type 2 diabetes mellitus with high cholesterol ,high triglyceride and low HDL (P<0.001) were observed in NAFLD patients

**Conclusion:** Liver biopsy is still the gold standard method to diagnose end stage NAFLD. However, it is a costly and invasive procedure with some limitations, such as sampling error so Recently radiological techniques, biomarkers such as lipid profile and clinical algorithms are being suggested to provide valuable noninvasive alternatives to histological diagnosis

# Evaluating the efficacy of intravitreal Ranibizumab for treatment of diabetic macular oedema.

Kherajbhai KH, Dept. of Ophthalmology, GMCH, Udaipur

**Objective:** To evaluate the effect of intravitreal Ranibizumab on retinal thickness in patients with macular oedema.

**Methods:** This is a retrospective analyses of 7 intravitreal injection of 4 patients. All patients underwent fundus biomicroscopy and OCT at baseline. All patients were treated with intravitreal Ranibizumab. Pair 't' test was done to evaluate outcome of treatment. Then post injection OCT was recorded to evaluate outcome.

**Results:** The central macular thickness(CMT) on OCT was 308micron(SEM 12.54) at baseline which reduced to 262micron(SEM 15.55)(P=0.0020).

**Conclusions:** Intravitreal injection of Ranibizumab results in significant reduction of macular thickness.

# To Study Serum Biomarkers in Cases of Fever With And Without Malaria.

Vasudev S, Vardey SK, Dept. of Biochemistry
S.M.S Medical College Jaipur

**Background:** The infection of liver cells by the Plasmodial sporozoites form of the malarial parasite can cause cellular inflammation leading to the leakage of parenchymal (transaminases) and membranous (alkaline phosphatase) enzymes of the liver and erythrocytes (Lactate dehydrogenase and acid phosphatase) to the circulation. Hence the assessment of acid phosphatase (ACP), LDH (lactate dehydrogenase) and liver enzymes like AST (Aspartate transaminases), ALT (Alanine transaminases) and ALP (Alkaline phosphatase) in malaria patients could represent additional and useful parameters in determining the clinical and prognostic aspects of the disease.

**Aims:** To assess the diagnostic value of serum LDH, AST, ALT, ALP activity (liver function biomarkers), LDH and ACP activity( RBC function biomarkers) in fever cases with and without malaria.

**Methodology:**25 each cases and control taken for the study. Patient selection to be done by simple random sampling with history of fever, chills & rigor after applying inclusion and exclusion criteria.

**Results and Conclusion:** Estimating serum enzyme levels as biomarkers in malaria; observed that enzyme AST, ALT, ALP,ACP,LDH activity increases significantly (p< 0.05) in patients as compared to control subjects. Hence there is a rationale in using these biochemical markers in malaria.

# Diabetes After Pancreatic Surgery: A Case of Management of Brittle Diabetes

Gaur A, Dept. of Medicine, GMCH, Udaipur

**Background:** In the developing world, pancreatic surgery is becoming more common, with an increasing number of patients developing brittle diabetes because of either partial or total pancreatectomy, with a significant impact on quality of life and survival. many aspects of diabetes after pancreatectomy are still not well defined. The treatment of diabetes in these patients takes advantage of the therapies used in type 1 and 2 diabetes; however, no specific guidelines for its management, both immediately after pancreatic surgery or in the long term, have been developed.

**Methodology:** An uncommon case of chronic pancreatitis with cyst which was operated 12 years back (patient had atrophic pancreas as post operative changes at present) had fluctuating sugar levels and episodes of hypo and hyperglycaemias because of improper use of insulin and lack of pancreatic supplements and how the sugar levels were managed and patient was discharged on a stable levels of sugar

**Conclusion:** Clinically, this type of diabetes presenting as a feature of generalized pancreatic insufficiency is difficult to control, but there is a remarkable paucity of recently published studies and there is no consensus regarding treatment pathways. We can conclude that the clinical management is mainly based on center experience and includes a trial of oral hypoglycemic drug and insulin if there is inadequate response and educate the patient on how to inject the insulin subcutaneously in a malnourished patients and use of pancreatic supplements in treatment of brittle diabetes

