VELNEWS

Voice of Velammal Medical College Hospital & Research Institute

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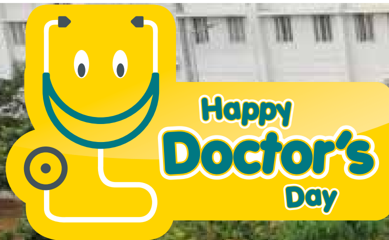

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EDITORIAL

"Velammal Medicos Walk" to "Beat Diabetes"

An event for "World Health Day" by Velammal Medical College Hospital, Madurai

This year, on 7th of April, people of Thiruppuvanam witnessed a mega walk by the doctors and students of Velammal Medical College Hospital, Madurai to create awareness about diabetes.

Diabetes is a silent killer disease, accounting for 6 deaths every minute throughout the world. According to the International Diabetes Federation, India is home to 6.91 crores diabetics and in 2015, around 10 lakhs Indians have lost their lives because of diabetes. The frequency of diabetes shows an alarming increase, which has been observed in both urban and rural areas. A more disturbing trend is the shift in age of onset of diabetes to a younger age in India. It is time to take appropriate preventive and curative measures against diabetes.

In connection with the World Health Day's theme of "Beat Diabetes", the Velammal Medical College is committed to create awareness and providing quality preventive and curative services for diabetes. To mark this day, Institute had organized a mega rally at Thirupuvanam between 8:30 a.m. to 10:30 a.m. Over 700 medical and allied health science students from VMCH & RI, Madurai along with school students from Velammal School, Tiruppuvanam marched on the streets of Thirupuvanam at 8:30 AM. The visionary chairman of Velammal group of institutions Shri. M. V. Muthuramalingam presided over the gathering and flag off the rally. The vice chairman of Velammal Medical College Hospital, Dr. S. Asokan, graced the occasion and addressed the gathering. He stated that diabetes is a lifestyle disease which is rapidly increasing even in rural areas. He emphasized that people with diabetes should keep their blood sugar under control to prevent complications. With the presence of Dean Dr. R.M.Raja Muthiah and Vice principal, Dr. P.K Mohanty, the program was a grand success. The awareness rally began at Velammal school Tiruppuvanam and advanced up to the old tehsil office. The students were highly enthusiastic and disseminating the message on prevention and treatment of diabetes mellitus during the rally.

The institute also organized a Diabetes Camp at their Rural Health and Training Centre, Ladanenthal between 9 AM and 1 PM in which specialists' consultation, free blood sugar testing and free medicines were provided. Around 500 patients benefitted from the camp.

A quiz competition was organized on Diabetes for medical students of the Velammal Medical College by department of Community Medicine in coordination with Indian Association of Preventive and Social Medicine between 2 pm - 4 pm. The winners were honored with trophies and certificates of merit.

This grand series of events organized by Velammal Medical College Hospital has been a milestone in promoting care, prevention and control of diabetes in the region.

It's time to walk regularly, eat healthy, and set right our lifestyle! Come join hands with Velammal to "Beat diabetes"!

Dr. Samir Bele.

A HUMBLE REQUEST FOR A NOBLE CAUSE

"Join hands with Velammal Medical College Hospital and do your share in helping the cardiac and cancer patients who are economically backward. Donate for the noble cause of saving lives through our 'Thirumathi Kunjaravalli Medical Aid Trust'

Together, let's make a difference in the lives of the less fortunate! "

Thank you.

M. V. Muthuramalingam,
Chairman,
Velammal Education Trust

Vice Chairman's Message

Dear Friends,

Greetings from Velammal!

I whole heartedly thank the medical fraternity of southern districts of Tamil Nadu for helping Velammal Medical College and Hospital grow.

The outpatients strength of the Velammal Medical College Hospital is consistently around 1500 and the inpatients strength is hovering around 500. VMC Speciality hospital is also making rapid progress.

The in-campus academic activities are conducted regularly in the form of CMEs and clinical society meetings. The death audit meetings held every month enable our doctors to discuss and advance. The faculties of Velammal have been participating in several national and international medical conferences. Dr. A. Madhavan, our Director of Cardiology and Cath lab, chaired a session on complex coronary issues at a conference of cardiologists held at Florida, USA in which Dr. M. Selvaganesh, our cardiologist presented a paper.

The students have been consistently achieving a pass percentage of 95% and over in the University examinations which speaks for the quality of our training in Velammal Medical College.

Our enthusiastic and energetic chairman, honourable M. V. Muthuramalingam, has embarked on a new venture. He has put forth a noble idea of sponsoring cardiac surgeries and cancer treatment for the poor patients. To achieve this, he has created **Thirumathi Kunjaravalli Medical Aid Trust.** The trust's target is to have Rs 200 Crorers as the corpus. To achieve this, we have a target of reaching 20, 00,000 people who are willing to donate Rs 1000 each. Though Rs 1000 is a small amount, a large number of willing people coming together can work wonders. The donors shall have an everlasting relationship with VMC and we are planning to acknowledge their kind gesture with a host of benefits in our services.

Friends, I request you to help the cause by donating ₹ 1000/- as Demand Draft or Cheque in favour of "Thirumathi Kunjaravalli Medical Aid Trust" payable at Madurai.

I request your cooperation and help in shaping a world class health care delivery centre called Velammal Medical College and Hospitals.

Thanking you.

Best wishes,
Dr. S. Asokan,
Vice Chairman,
VMCH

A Case of Congenital Nephropathic Cystinosis with Multiple Endocrinopathies

G. Mathevan[1], S. Natarajarathinam[2], R. V. Jeyabalaji[2], T. Karthikraj[3], S. Shunmuga Arumugasamy[4]

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CASE REPORT

A-6-yrs-old girl was hospitalised with complaints of not gaining weight, polyuria, polydipsia, deformity of lower limbs and constipation. She was apparently normal until her first birthday (except for delay in motor milestones), after which the above complaints were noticed. On examination, height (74.5cm) and weight (8.5kg) were below 3[rd]percentile (figure 1A); coarse facies, dry skin (fig 1A) and bony changes of rickets (figure 1C-1E), were noted. The blood investigations showed hypocalcemia, normal phosphate, increased alkaline phosphatase, increased intact parathyroid hormone, decreased 25 (OH) vitamin D levels, decreased 1,25 $(OH)_2$ vitamin D, normal anion gap metabolic acidosis, hypokalemia and raised creatinine (table 1). She passed dilute urine, which showed proteinuria, glycosuria, generalised aminoaciduria, phosphaturia, bicarbonaturia with a positive urine anion gap and normal calcium to creatinine ratio (table 2). Polyuria was confirmed by an output of 8ml/kg/hr. X-ray wrist showed bony changes of rickets with delayed bone age (figure 2A) and abdominal sonogram revealed grade III medical renal disease.

Investigation	Index Case	Sibling
Haemoglobin (g/dl)	9.1	7.5
Serum creatinine (mg/dl)	2.3	0.8
Blood urea (mg/dl)	73	53
Serum sodium (mEq/L)	132	134
Serum potassium (mEq/L)	2.4	4.5
Serum chloride (mEq/L)	99	118
Serum calcium (mg/dl)	7.8	7.2
Serum phosphorous (mg/dl)	3.8	3.5
Serum alkaline phosphatase (IU/L)	632	625
Serum intact parathormone (pg/ml)	1223.4	941
25(OH) vitamin D (ng/ml)	16.1	14.5
1,25 (OH)2 vitamin D (pmol/L)	27.6	30.2
Blood pH	7.33	7.3
Urine pH	7.5	7.0
Blood bicarbonate (mEq/L)	16	13
Urine bicarbonate (mEq/L)	12	6.2
FE bicarbonate (%)	16	14.8
Urine creatinine (mg/dl)	10.4	6.2
Urine phosphorous (mg/dl)	8.6	15.8
TMP/GFR	1.4	1.75
Uriine aminoacidogram	glutamic acid, valine, glycine	glutamic acid, valine, glycine
Urine specific gravity	1.005	1.010
Urine glucose	trace	nil
Urine protein	+++	+
Urine potassium (mEq/L)	13.6	9.6
Urine sodium (mEq/L)	62	75
Urine chloride (mEq/L)	63	66
Urine anion gap	11.6	18.6
Urine calcium/creatinine	0.18	0.2
T4	< 0.2 ng/dl (FT4)	6.96 µg/dl (Total T4)
TSH	>100	10.79

Figure 1, 1A: patient with a normal 6-yrs-old girl; 1B; hypothyroid facies; 1C: widened wrist; 1D: Harrison sulcus and rachitic rosary; 1E: Genu valgum (left > right)

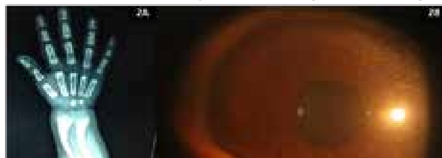

Figure 2, 2A: rachitic changes with delayed bone age (BA=1 year); 2B: cystine crystal deposits in cornea

With the above findings, the child was suspected to be a case of renal rickets; probably, Fanconis' proximal tubulopathy with renal failure. Since primary renal tubulopathies are extremely rare to present with renal failure during the first decade of life, further evaluation was done to find out a systemic cause for Fanconi syndrome. Ophthalmologic examination revealed the presence of cystine crystal keratopathy (figure 2B) suggesting the diagnosis of cystinosis. With the background diagnosis of cystinosis, extreme short stature, coarse facies (fig 1B), large tongue, history of constipation and dry skin prompted evaluation of thyroid status which revealed severe primary hypothyroidism.

The child was treated with oral L-thyroxine at 6 µg/kg/day, sodium bicarbonate (4 mEq / kg / day), potassium chloride (2 mEq / kg/day), alfacalcidol (0.05 µg / kg / day) and calcium carbonate. Child was registered in Cystinosis Foundation of India for procurement of cysteamine for definitive therapy.

The patient has a-4-years-old younger sibling who had no obvious bony deformities but had history of polyuria and polydipsia. She had severe growth failure (height: 71 cm; weight: 5 kg). Her evaluation revealed generalised proximal tubular dysfunction with stage 3 chronic kidney disease. Ophthalmological evaluation confirmed cystine crystal deposits in the cornea. Her investigations are listed in table 1. She had subclinical hypothyroidism and was started on L-thyroxine supplementation and treated with other supplements like her sister.

DISCUSSION

Cystinosis is a form of lysosomal storage disorder, caused by defective lysosomal membrane transport protein, cystinosin. Its prevalence is approximately 1:100,000 to 1:200,000. There are three types of cystinosis. Nephropathic or classic infantile cystinosis (NC), the most severe form, inevitably leads to renal failure in the first decade of life. The intermediate form has all the manifestations of the nephropathic form, but its onset is generally around the time of adolescence. Non-nephropathic or ocular cystinosis is characterized only by corneal crystals and photophobia. About 95% of patients have renal involvement.1 All three forms are allelic recessive disorders caused by mutations in the CTNS gene.

Pathogenesis is due to intracellular accumulation of cystine in all the organs. Since cystine is poorly soluble, it forms into crystals in various tissues. Among them, renal tissue is the most susceptible one.

Untreated nephropathic cystinosis is associated with poor growth and proximal tubular dysfunction (Fanconi syndrome) at 6–12 months of age, glomerular failure by age 10 years, and various non renal complications. Fanconi syndrome is characterized by the generalized failure of proximal tubules to reabsorb water, electrolytes, bicarbonate, calcium, glucose, phosphate, carnitine, amino acids, and tubular proteins. 2 Failure of the proximal tubules to reabsorb phosphate and calcium leads to Vitamin D-resistant hypophosphatemic rickets. Other symptoms such as anorexia, vomiting, and feeding difficulties, combined with renal losses of nutrients, cause poor nutritional status and failure to thrive. The renal phenotype consists of an overlap of Fanconi syndrome with progressive loss of glomerular function.3

Without therapy, patients may develop multiple endocrinopathies like primary hypothyroidism, delayed puberty and primary hypogonadism in

males. 4 They also have photophobia 5, benign intracranial hypertension and neurobehavioral abnormalities.

Definitive diagnosis is based upon a high index of suspicion because of the clinical presentation, supported by slit lamp examination of the corneas showing cysteine crystals, which are generally present around 16 months of age.5 Measurement of cystine in a mixed white blood cell preparation enriched in polymorphonuclear leucocytes, performed using the cystine binding protein (CBP) assay or mass spectrometry, secures the diagnosis.6 But, presently it is not available in India.

Fanconi syndrome is treated by replacement of renal losses, nutritional support, free access to water and supplementation with citrate to alkalinize the blood. Oral potassium, phosphate and vitamin D supplements are also required. Renal transplantation may be needed if there is progressive renal failure with hypertension.6 Cystine depleting therapy, in the form of oral cysteamine bitartrate (Cystagon) at a dose of 1.3 gm/m2/day in divided doses, has revolutionized the management and prognosis of nephropathic cystinosis.7 Cysteamine, when started early has been successful in promoting growth and delaying complications thereby improving life expectancy.

CONCLUSION

Generalised proximal tubular dysfunction including hypophosphatemic rickets and nephrogenic diabetes insipidus and early renal failure are characteristic features of cystinosis. Primary hypothyroidism is the other endocrine manifestation of cystinosis and all these factors contribute for growth failure in cystinosis.

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“CONSENT” redefined

A properly worded consent is an essential prerequisite to treatment and along with valid documentation, a powerful instrument to exonerate the medical practitioner accused of malpractice. It reflects the corpus of information given to the patient and so courts attach great importance to it in the process of adjudication.

In a recent judgment in Dr. Samira Kohli vs. Praba manchanda, the Hon'ble Supreme Court has considered the matter of “consent' at length, taking into consideration the low level of literacy of the people and the general situation prevailing in operation theaters, and has replaced “informed consent” with what is now known as “Real Consent”.

The standard in Real Consent as opposed to informed consent is a “minimum of adequate level of information”. To put it precisely, it is what a “prudent doctor” would want to tell his patient without burdening him with too much information or too little.

For easy understanding of the features of informed consent and real consent, a comparative picture is given below:

Ingredient	Informed consent	Real consent
Nature of the disease	Yes	Yes
Nature of the treatment	Yes	Yes
Alternative treatments available	Yes	No
Pro & Cons of treatments	Yes	No
Consequence of refusal	Yes	No
Complications	Immediate and remote complications	Substantial complications only
Life after surgery	Yes	No

As can be seen from the above table, brief information about the disease, treatment and complications would suffice for “real consent'. If however, the patient puts any questions, they must be answered fully and truthfully. This judgment ought to bring considerable relief to doctors who are very often admonished in the Courts, for “improper consent'.

It may be noted however, that “informed consent” is still the desirable ideal. It shows respect for the autonomy of the patient. So, dear clinician, please go for it if possible. Remember, Informed consent makes the patient a partner in the treatment schedule; not just a dumb recipient or a potential adversary.

If there is a valid consent along with proper documents reflecting standard practice, you have nothing to fear from the law. So, take care of the “consent”. It will be your staunch ally in the court.

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Myocardial infarction leading to ventricular septal rupture - A surgeon's challenge

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ABSTRACT

Incidence of myocardial infarction (MI) leading to ventricular septal defect, now called ventricular septal rupture (VSR) has come down with widespread use of thrombolytic therapy. Once in a while we still come to see this combination of acute MI with VSR, which carries high risk and is a challenge to any cardiac surgical facility. With an operative mortality of 42.9% this combination is considered as a condition with highest mortality in cardiac surgery. We are reporting one such case which came to cardiac surgery department in this institute in a state of shock and was successfully managed. We are discussing this case because of its relative rarity and the challenge it carries in management.

Keywords: Ventricular septal rupture, myocardial infarction, intra aortic balloon pump

INTRODUCTION

Incidence of myocardial infarction (MI) leading to ventricular septal rupture (VSR) has come down with widespread use of thrombolytic therapy. Once in a while we still come to see this combination of acute MI with VSR, which carries high risk and is a challenge to any cardiac surgical facility.[1] A 59 years old gentleman had presented to this centre with acute anterior wall MI and features of low cardiac output. He was managed with preoperative stabilization with intra-aortic balloon pump (IABP) followed by surgery with techniques to address the potential failures.

CASE REPORT

A 59 years old male, a known diabetic on irregular anti-diabetic treatment came to cardiology facility through emergency department with history of chest pain for two days and severe breathlessness and palpitation. He was initially treated in a peripheral centre for MI and referred to this centre in view of his worsening general condition.

ECG revealed presence of Anteroseptal infarction. The patient was in a state of low output with blood pressure initially around 120 mmHg systolic reducing to 90 mmHg in a period of 3 hours. Urine output too showed decreasing trend and heart rate was around 110 per minute. His renal and hepatic functions were deranged marking low cardiac output state. Auscultation revealed a systolic murmur in the left parasternal space. ECHO scan confirmed presence of ventricular septal rupture close to the apex around 9 mm size. There was Akinesia of the apex and adjoining anterior wall.

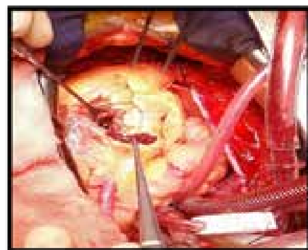

Figure 1: LV anterior wall opened over the scarred area and clots being evacuated from LV lumen

Figure 2: The ventricular septal defect seen through the ventriculotomy. Stitches taken for patch closure of defect

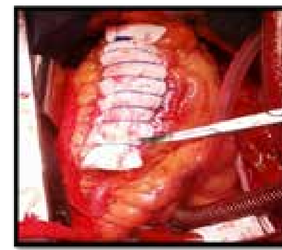

Figure 3: Completed repair of the ventricle

Coronary angiogram was done and intra aortic balloon pump (IABP) support instituted. Angiogram revealed triple vessel disease needing grafts to left anterior descending artery (LAD), obtuse marginal (OM) and posterior descending artery (PDA). Patient gradually stabilized on IABP support and was taken up for surgical repair of Ventricular septal rupture and coronary bypass grafting surgery the day after angiogram.

OPERATIVE PROCEDURE

The patient was positioned supine with monitoring lines for invasive blood pressure, Swan Ganz for PA pressure, ECG monitoring leads and Trans oesophageal ECHO probe. General anesthesia was induced and after median sternotomy, established cardiopulmonary bypass cannulating aorta and both vena cava. The great saphenous vein was harvested as conduit. Since the LAD territory was fully infarcted and muscles were non viable, we decided not to harvest internal mammary artery. The heart was arrested with antegrade cold potassium rich blood cardioplegia solution and individually anastomosed saphenous vein conduits to LAD, PDA and OM.

Left ventricular (LV) anterior wall close to apex showed scarring and was thinned out. The scarred left ventricular anterior wall was opened longitudinally parallel to Left anterior descending artery. There was around 25 ml of clots inside the LV apex. (Figure 1) A defect was seen in interventricular septum around 12 x 5 mm in size. (Figure 2)

After evacuating the clots gluteraldehyde treated pericardium was used to close the defect. Infarcted dead tissues were removed. Care was taken to take stitches well away from the margin to avoid taking stitches in compromised vascularity areas, thus avoiding chance of stitches cutting through. A strip of pericardium was used as pledgetted for these stitches. Anteriorly the patch was approximated to anterior wall. The LV opening was then closed with stitches and hard felt buttressing. Over and over sutures were then made with another hard felt reinforcement over the area of ventriculotomy. (Figure 3)

Subsequently the clamp in aorta was released and proximal anastomoses of SVG grafts were done to aortic root after applying a side clamp. The patient was then taken off cardiopulmonary bypass with ionotropic support adrenaline (0.05 mcg / kg / hr) and dobutamine (5 mcg/kg/hr) along with IABP. In view of oedematous myocardium the chest was only temporarily approximated. Chest was properly closed in layers on second post operative day. He recovered fully, with his renal and liver function tests returning to normal level. He was discharged in stable condition on 9th postoperative day.

DISCUSSION

Three mechanical complications that can occur with MI are ventricular free wall rupture, ventricular septal rupture and papillary muscle rupture, given in the order of decreasing incidence. Free wall rupture in most situations leads to sudden death. With the practice of thrombolysis in myocardial infarction even in rural setup the incidence of ventricular septal rupture complicating MI has come down from 1-2% to 0.2%.[2]

The ventricular rupture occurs after a massive infarction due to necrosis of muscles and its subsequent giving away. It takes a few hours after infarction to develop a rupture. Reports give varying duration from 16 hours to even 2 – 8 days for developing VSR.[3] The patient deteriorates rapidly after the rupture of ventricular septum because of acute shunting of blood from the left ventricle to the right. The bigger the opening more will be the shunt and faster the deterioration. The size is seen to increase with time after infarction. Another peculiarity is that the shunt increases with

increase in systemic resistance and decreases with reduction of after load.

The diagnosis of MI with VSD is an indication for surgery,[4] unless we are sure that the patient will not survive the procedure. Once an ejection systolic murmur is heard over precordium in a recent infarct patient, ECHO has to be done. If diagnosis of VSR is confirmed, further management has to be in war footing, because rapid deterioration is the rule in this situation.

Intra aortic balloon pump (IABP) has to be instituted even if he is stable because deterioration can progresses in the next 24 -48 hours, with the size of VSD going up. The purpose of IABP is to reduce the afterload during systole thereby reducing the systemic resistance and left to right shunt. This prevents further deterioration and can even stabilize the patient, if the shunt doesn't increase.

With IABP support the patient can undergo coronary angiogram to know the coronary status and decide on the grafts needed. In majority of the cases the culprit lesion will be the LAD, hence 60 % of VSR occurs following ASMI and the defect will be in the anterior part of septum. Remaining 40% cases have posterior septal rupture following occlusion of RCA or PDA.

During surgery since the major part of the muscles supplied by LAD has necrosed, we decided to use only venous grafts. The major surgical point to be taken care of is to close the VSD with a patch, usually pericardial, which should be anchored well away from the margin, so that the muscles seating the patch are viable. Visually it is difficult to differentiate between viable and nonviable areas. Taking sutures away from margin on viable myocardium ensures that the suture doesn't cut through in postoperative period producing a recurrence of shunt. This recurrence can be detrimental in postoperative period. Many patients who show improvement in the immediate postoperative period deteriorate suddenly after 2-3 days because of this.

Once the surgical part is over, with proper intensive post operative care to overcome the already existing multi system failure, the patient can be salvaged.

CONCLUSION

MI with complicating VSR is a surgical challenge anywhere in the world. With proper planning and coordination between the cardiologist, surgeon, anesthetist, perfusionist and the intensivist the best result can be achieved.

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BIOLOGICS AND BIOSIMILARS IN CLINICAL RHEUMATOLOGY PRACTICE- EXPERIENCE FROM SOUTH INDIA.

Subramanian Nallasivan, Asst Professor and Consultant Rheumatologist, Velammal Medical College Hospital and Research Institute, Madurai, India.

Biologic disease modifying anti-rheumatic drugs (bDMARD) have revolutionized the management of several rheumatic disorders. Bio similars are being developed in India and the efficacy and safety are comparable to reference products, with affordable cost. Patients stand to gain from an expanded access to these drugs, however only few references can be found in the literature, in India.

Objectives: To review the use of synthetic DMARDs- both Biologics and Biosimilars in two centres of Rheumatology in south India and assess the efficacy/ safety.

Methods: All Biologic users for a period of one year in the Rheumatology centre in Velammal Medical College Hospital, Madurai and Aruna Hospitals, Tirunelveli were reviewed (Oct 14-Oct 15). All should satisfy ACR criteria for diagnosis, failed DMARDs and all are screened as per UK-NICE guidelines.

Results: Data from 19 patients in this retrospective review below.

Table 1 - Biologic drugs

Biologics	Ristova	Actremra	Enbrel
Patients	3	1	1

Table 2 – Biosimilar drugs

Biosimilars	Intacept	Exemptia	Ritux	Mabtas
Patients	7	5	2	1

Table 3 – Various Indications for the use of bDMARDS

Rheumatoid arthritis	12
Spondyloarthritis	5
SLE	1
ANCA Vasculitis	1
Psoriatic arthritis	1

Of the 12 patients with RA, 10 were Bio-naive, received the biosynthetic DMARDS and achieved remission in 3 months. Average DAS score improved from 5.65 to 2.01. In the Spondyloarthropathy group, pre- treatment average BASDAI was 6.64 and 3 months following biosimilars, BASDAI was 2.6. To date no infective complications were reported. One patient had cutaneous allergy to Intacept. Conclusion: Biosimilars and Biologics are safe and effective, when used in the inflammatory rheumatological diseases in Indian patients. They now come at affordable cost and help to improve the quality of life of patients.

VMCH &RI, Madurai DEPARTMENT OF OBSTETRICS & GYNAECOLOGY

1. CME on 17.05.2016, Topic: Asymptomatic Bacteriuria
   Speakers :
   Dr.Yuri Gagarin, M.D., (General Medicine),
   Dr. Jothilakshmi, M.D., (OG)
2. CME on 29.06.2016, Topic: PCOS
   Speakers:
   Dr. Kumaravel, Consultant Endocrinologist.,
   Dr.Rajalakshmi Preethi., M.D., Radiology.
   Dr.Kavitha.G, M.S., (OBG)

VMCH &RI, MADURAI AT INTERNATIONAL CONFERENCE AT GERMANY

I am honoured and proud to share the happy moment that our Rheumatology department has received worldwide attention in the International Congress on Autoimmunity Annual meet in Leipzig, Germany in April 2016.

Third year medical student, Jane S. Sathiavadivu, had done a study on "Correlation of clinical profile with Immunological markers in common Rheumatological diseases in our clinic" and presented the data as poster. It was appreciated by wide audience and well received. This was her first appearance in a scientific forum after joining the medical college. The medicine department and the college team wished her success in future endeavours.

Our Rheumatologist, Dr N. Subramanian, had presented data on "Biologics and Biosimilars in Rheumatology in South India", which was appreciated by researchers from across the globe. He talked about the use of different newer synthetic biologic drugs in controlling common rheumatologic diseases. The newer biologics and the biosimilars (which are bio equivalent with affordable cost and equal efficacy) have improved the quality of life of our patients and gained independent mobility.

The Rheumatology department is continuing its efforts to improve patient satisfaction, quality of life and clinical research to gain insights to the fascinating speciality.

Dr. N. Subramanian, MD., MRCP (UK), MRCP CCT (Rheumatology, London), FRCP (Edinburgh), Assistant Professor, Department of Medicine, VMCH&RI.

10TH INTERNATIONAL CONGRESS ON AUTOIMMUNITY

APRIL 6-10, 2016, LEIPZIG, GERMANY

Correlation of clinical profile with immunological markers in common Rheumatological disorders in a tertiary care Medical College Hospital, South India

Jane.S.Sathiavadivu, 3rd Year Medical student

N Subramanian Assistant Professor and Consultant Rheumatologist

Velammal Medical College, Madurai,India

Introduction:

Rheumatological disorders (RD) affect 20% of the world's population. Indian studies reveal 18%-24% of the population suffers from RD, commonly Rheumatoid arthritis (RA), Spondyloarthritis (SpA), Systemic Lupus Erythematosus(SLE), and Sjogren's syndrome.

Aims:

This study aims to find the correlation between the clinical diagnosis of common rheumatological disorders and the immunological markers, thereby helping in better understanding of the disease.

Methodology:

This prospective observational study was conducted at Velammal Medical College Hospital and Research Institute, Madurai in South India. 100 consecutive newly diagnosed patients with RD were reviewed using clinical data and tests- Erythrocyte Sedimentation Rate (ESR), Rheumatoid Factor (RF), Anti Nuclear Antibody (ANA), Anti Cyclic Citrullinated Peptide (Anti-CCP).

Results:

Image 1 - Distribution of the RDs observed in the study

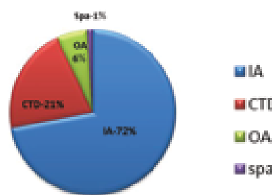


Table 1 - Types of Connective Tissue Disorder seen in the study

Connective Tissue Disorder	No of patients
Systemic Lupus Erythematosus	13
Scleroderma	3
Sjogren's syndrome	2
Mixed Connective tissue disorder	2
Undifferentiated CTD	1

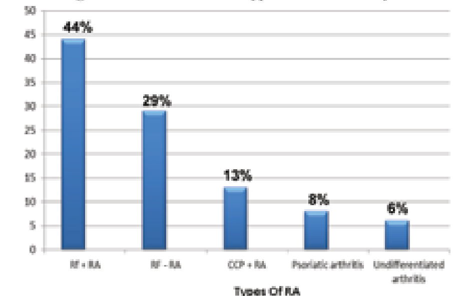
Table 2 - Different types of inflammatory arthritis

Types of IA	Rf + RA	RF - RA	Anti- CCP RA	Psoriatic arthritis	Undifferentiated RA
No of cases	32 (44%)	21 (29%)	10 (13%)	5 (8%)	4 (6%)

Findings:

1. Raised ESR was found in all RA patients along with RF positive in 32/72, Anti CCP elevated in 10/72 and RF negative in 21/72.
2. CRP was normal and ESR was raised in psoriatic and spondyloarthritis.

Image 2- Percentage distribution of different types of Inflammatory Arthritis



3. Although SLE is a rare entity in male, this study observed four cases- Two were teenagers and two were adults (one with neuropsychiatric lupus and one with Interstitial lung disease).

Conclusion:

1. This study found 100% correlation between clinical profile and immunological markers in Connective tissue disorders.
2. In Inflammatory arthritis there was 94% correlation between clinical profile and immunological markers.
3. This study supports the concept of very good correlation of clinical profile with immunological investigations in inflammatory rheumatologic diseases, thereby helping in the diagnosis and treatment of diseases and long term prognosis.

Reference:

1. Mijiyawa M. Epidemiology and semiology of rheumatoid arthritis in Third World countries. Rev Rhum Engl Ed.1995 Feb; 62(2):121-6
2. Malaviya AN, Kapoor SK, Singh RR, Kumar A, Pande I. Prevalence of rheumatoid arthritis in the adult Indian population. Rheumatol Int. 1993;13 (4):131-4.
3. Conigliaro P, Chimenti MS, Triggianese P, Sunzini F, Novelli L, Perricone C, Perricone R. Autoantibodies in inflammatory arthritis. Autoimmun Rev. 2016 Mar 9.

CME on 'Combating Microbes in Hospital Critical Areas'

A one day CME on 'Combating Microbes in Hospital Critical Areas' was conducted by the department of Microbiology under the auspices of Indian Association of Medical Microbiologists-Tamilnadu and Puducherry Chapter on 2-4-2016 at the Auditorium in the 3rd floor of Velammal Medical College Hospital, Madurai. The CME was organized with Prof. Dr. Jhansi Charles M.D. as the organizing secretary. It was an attempt to address some issues involved in combating microbes in hospital critical care areas like intensive care units, operation theatres and dialysis units. Fungal infections in ICUs are an important cause of morbidity and mortality particularly in patients with hematological malignancies and patients who undergo bone marrow transplantations. With the increasing rise in immuno compromised patients, managing hospital acquired fungal infections has emerged as a challenging task. Another area of concern is effective sterilization of closed critical areas like Intensive care units and operation theatres. With the improved infra structure of operation theatres, sterilization procedures are also being continuously revised. The current approaches and the future perspectives of this area were discussed in this CME.

Also, dialysis units have become a part in most of the hospitals. Device associated infections in dialysis patients are inevitable. It is a macro problem that starts with micro adherence. Apart from bacterial infections, dialysis patients are also at risk of blood transmitted viral infections. The pathogenesis, transmission and response to vaccines are different from dialysis patients from the regular population.

Single most effective measure of combating nosocomial infection is by adopting proper hand hygiene measures. Every health care worker is aware that clean care is safer care. Yet the baseline compliance on an average is 40%. So the challenges, necessities and effects of hand hygiene measures were also discussed in this CME.

The CME provided a platform where experts from various specialities shared their knowledge and experiences on the following topics:

Hospital acquired fungal infections in ICU patients by Dr. T. Kasi Viswanathan, Head, Dept. Of haemato-oncology, Meenakshi Mission Hospital.

Sterilisation of closed critical spaces- Approaches now and tomorrow by Dr. Dhanapal, Prof and Head, Dept of Microbiology, KAPV Govt. Medical College, Tiruchi.

Infection during Haemodialysis- Risks and prevention and devices associated infections- pathophysiology and management by Dr. Jones Ronald, Professor and Head, Dept. of Nephrology, Vinayaga Mission Medical College, Salem.

Hand Hygiene- Necessity, challenges and solutions by Dr. Apurba Sastry, Asst. professor, Department of Microbiology, JIPMER, Puducherry.

Enabling technologies for infectious diseases screening by Dr. Cheirmaraj, Manager-Technical support, Ortho clinical diagnostics, India.

What is new in Tuberculosis diagnosis? By Dr. Suresh, Manager, Alere.

As nosocomial infections associated with the critical areas of hospitals have been a growing concern to doctors and paramedical staff, the CME was practically useful for the 350 participants including clinicians, microbiologists, paramedical professionals involved in infection control practices who had attended the CME. The CME was accredited with 10 credit points by the Tamil Nadu Dr. MGR Medical University and 2 credit hours by the Tamil Nadu Medical Council.

Welcome address by Dr. Jhansi Charles

Inauguration by Chairman Sir Shree M. V. Muthuramalingam

Chairman sir addressing the gathering

The audience

Dr. Jones Ronald

Dr. Kasi Viswanathan

Dr. Dhanapal

The audience

CME on Pediatric Gastroenterology – 9th June, 2016

The Departments of Gastroenterology and Pediatrics of VMCH & RI conducted a CME on Pediatric Gastroenterology on 9th June 2016, under the guidance of the honorable Chairman and honorable Vice Chairman. Dr. G. Mathevan, HOD, Department of Pediatrics, welcomed the learned gathering. Dr. A. C. Arun, Medical Gastroenterologist of VMCH & RI delivered an elegant lecture on "Icterus in childhood – The Good, The Bad and The Ugly", which was well received by the audience. Dr. M. Nagendran, HOD, Dept. of Pediatrics, Madurai Medical College, chaired the session. Subsequently, Dr.S. Natarajarathinam, Professor of Pediatrics, VMCH & RI, effectively coordinated a panel discussion on "Abdominal pain in children – Opening the Pandora's box". The panelists were Dr. G. Mathevan, Dr. G. Ganesh Prabhu, Dr. S. B. Rena Rosalind, Dr. M. Mariappan and Dr. A. C. Arun. There was active interaction between the panelists and the audience. The Dean, the Director of Medical Services, the Medical Superintendent and retired Professors of Pediatrics from Madurai Medical College attended the event. The event was well organized by the Assistant Professors of the department of Pediatrics. Dr. R. V. Jeyabalaji, Professor of Pediatrics, VMCH & RI delivered the vote of thanks. The CME highlighted the need for complete evaluation of children with jaundice and pain abdomen for early diagnosis and prevention of complications.

Report submitted by,
Dr. A. C. Arun, M.D., D.M.
Medical Gastroenterologist,
VMCH & RI.

Dr. A. C. Arun, Medical Gastroenterologist delivering a lecture in the CME on Pediatric Gastroenterology

Well organized panel discussion by **Dr. S. Natarajarathinam** during the CME on Pediatric Gasroenterology

WORKSHOP ON COMMUNICATION SKILL

On 5th May 2016, Thursday, between 2 p.m. to 4 p.m. in the lecture hall-4, Medical Education Unit, Velammal Medical College Hospital and research Institute, Madurai organized a workshop on communication skill titled "**Empowering Communication: Viva Voce and Answer Writing Skills"** for 2nd year MBBS students. The aim of the workshop was strengthening the communication skills of medical undergraduate students of VMCH & RI.

1. Dr. P. K. Mohanty, Vice Principal of VMCH & RI, Madurai introduced the programme topic and speaker. He emphasized the importance of communication in academics and medical profession. He welcomed the dignitaries and participants to this programme.
2. Dr. Raj Kishore Mahato, Professor of Pharmacology and speaker of the day explained the various factors influencing the learning environment in his session and discussed ways and techniques to improve both verbal and nonverbal communication.
3. Dr. John Rajpathy, Professor of Physiology, VMCH & RI, Madurai proposed the vote of thanks.
4. 149 participants attended the programme. Around 12 faculty members also joined the programme.
5. Pre-test and post test to assess usefulness of the programme was conducted for students. Post test score was more than pre-test score as shown in Figure 1.

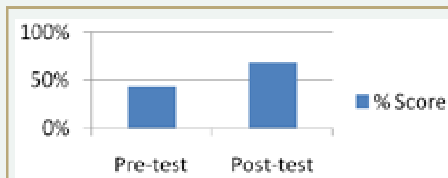
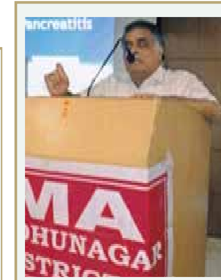


Figure 1: Average score(%) of participants in pretest (144%) and post-test (69%) for the programme; empowering communication



Dr. S. Asokan, Vice Chairman, Velammal Medical College Hospital and Research Institute Madurai speaking on **Alcoholic Pancreatitis at IMA,** Virudhunagar meeting

Participants

Medical Education Unit, VMCH & RI, Madurai.

YOGA A NEED OR DILEMMA (PART- 4)

International day of yoga was celebrated with the theme "Beating Stress and Greeting Success" on 21st June 2016 in the Auditorium, 3rd floor, VMC Hospital, Madurai.

- Stress is a normal part of our life.
- Stress is like shadow of our body. "No light No shadow". Similarly "No stress, No progress".
- Perception of stress is more important than the stress itself. If it is taken as a challenge, it is a trigger for success but if it is taken as a threat it is an obstacle for success.
- Yoga is a way of life. Though there are overlapping features in Yoga and gym, they have their own importance. Yoga dominates on balance and relaxation of both body and mind but gym dominates on calorie burn and muscle strength.
- Complex difficult body posture is not the only yoga. Rather, it is a part of it. Benefits of yoga come through making the body active, flexible and synchronizing it with breathing as well as harmonizing the relationship with surrounding.
- During yoga asana in most of the situations there is exhalation while moving the body towards gravity and inhalation while moving the body against the gravity.
- Doctors should induce smile in the face of patients and their family members without losing their own smile.

Laughing, a part of yoga is the best medicine but laughing without reason needs medicine.

Contributed by,
Dr. Raj Kishore Mahato,
Professor of Pharmacology,
Academic counselling Centre,
raj_kishorek7@rediffmail.com.

INTERNATIONAL DAY OF YOGA CELEBRATION

To mark the International day of yoga, Velammal Medical College Hospital and Research Institute, Madurai organised a programme based on stress and yoga in two phases. In the 1st phase on 18th June 2016, an essay writing competition was conducted for 2nd and 3rd MBBS students on the topic "Stress and Medical Professionalism" in the lecture hall-3. A total of 25 students participated in this event. Their answer scripts were coded and evaluated by our expert team comprising of Dr. T. Venkat Ramanaiah, Professor & Head of Forensic Medicine and Dr. Samir Bele, Professor & Head of Community Medicine. In the 2nd Phase, on 21st June 2016, a lecture session and a demonstration session were organised between 2 p.m. to 4 p.m. in the hospital auditorium, 3rd floor, VMC Hospital. The Programme was coordinated by Dr. Raj Kishore Mahato, Professor of Pharmacology and his team members. The programme was graced by our respected Vice Chairman, Dean, Director of Medical services, Medical superintendent and Vice principal.

After the addressing of the gathering by our respected VC, the result of essay writing competition was announced by Dr. S. Thamizharasi, Professor and Head of Pharmacology. Sowmiyaprabha S. of 2nd year (1st place), C. Madhan of 3rd year (2nd place), Sowmiya A. of 3rd year (3rd place) were declared as winners of the essay writing competition. Our Vice chairman appreciated their effort and distributed the prizes and certificates. Our respected Dean distributed the certificate to other participants of the essay writing competition.

During the lecture session, Dr. Raj Kishore Mahato, Professor of Pharmacology and speaker of the day, elaborated on the topic "Beating Stress and Greeting Success". He explained the relationship between stress and success, measures to control it, scientific basis of yoga and yoga in health promotion.

During demonstration session, Dr. M. Brahadeesh, Assistant Professor of Pharmacology demonstrated the basic asanas and highlighted their benefits. Sowmiya A. of 3rd year also participated in the demonstration session.

During the interactive session, our Vice Principal shared the idea to have a yoga club for the welfare of students.

114 MBBS students and 25 faculty members actively participated in this programme.

Dr. S. Asokan, Vice Chairman, addressing the gathering

Dr. Raj Kishore Mahato conducting session

Dr. M Brahadeesh demonstrating yoga asanas

Participants of essay writing competition

Dr. Raj Kishore Mahato, Programme co-ordinator
Dr. M. Brahadeesh, Programme co-coordinator
Academic Counselling Centre, VMCH & RI, Madurai.

XPERANZA'16

As the evening sky broke into colours, we the RETALIONZ organised XPERANZA'16- the second intramural cultural event of VMCH&RI. Blessed with the drizzles from heaven, on the beautiful evening of May 11th &12th, we conducted a wide variety of dazzling cultural events. This wonderful evening was honoured by the presence of our Honourable Vice chairman, our beloved Dean, our respected Director of Medical Services, Medical superintendent and Vice Principal. Students were divided into 4 houses namely Centaurs, Lycans, Chimeras and Minotaurs to promote sportsmanship and competitive spirit.

Xperanza provided a huge platform to unleash the talents of the vibrant Vellamalians. The two days saw exuberant students participate in a myriad of competitions. The uproar of dance and music reached the sky and exploded into glorious sparks. The competitions helped foster friendly relations between students of different years. The teaching faculty extended their help and spent their precious time by acting as judges for various off-stage and on-stage events. With competitions in the field of painting, pencil sketching, mehendi, vegetable carving, worth out of waste, flameless cooking, poetry, hair styling, rangoli, face painting, dancing, singing, band music and informal events with a quirky twist, XPERANZA promises to be an unforgettable event. Finally, the overall championship for culturals – Xperanza'16 was bagged by LYCANS and the runners up were the CHIMERAS. We cannot end this summary without mentioning the commendable effort and meticulous planning of Dr.John Rajpathy, Dr.Vallish B N & Dr. Poongodi, the culturals co-ordinators. Great sincerity and commitment put in by the student coordinators Maria Vidhyan.S, Karthika.B, Shyam.M, Jeya Priya.U, Tamil Nila.P & Udhistiran were appreciable. Special mention to Shreedher priyan for his never ending enthusiasm. My heartfelt gratitude to our honourable chairman for giving us this opportunity to celebrate Xperanza'16. We also extend my gratitude to Dr.Uwaraja & Dr.Christopher for your constant support. This meet shall be a milestone in the prestigious history of VMC and has imparted values like discipline, responsibility, self-confidence & team effort. Overall, it was a memorable event with moments to be treasured.

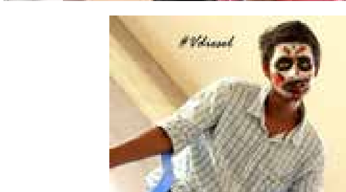
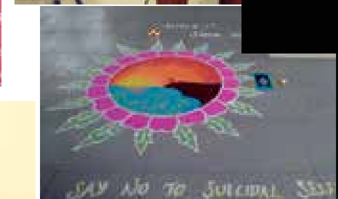
Ms. Karthiga B.,
Cultural Secretary

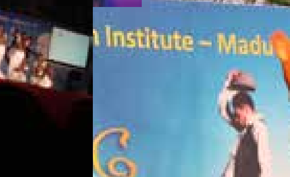
Mr. Maria Vidhyan,
Cultural secretary

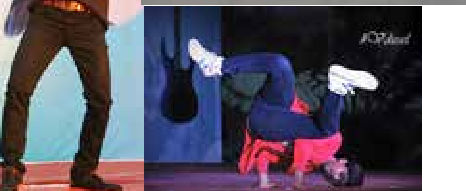
Annual Sports Fest- Xperanza 2016

The second edition Velammal Medical College's very own annual sports fest Xperanza 2016 was held from April 11th to May 19th 2016. The Chairman, Vice Chairman and the Dean inaugurated the first game, the Men's Football match. Football, Cricket, Basketball, Volleyball and Throw ball were the major sports held in the college grounds. There was a battle of wits during the Chess competition. Both men and women put their best strategies on the board and improvised as the game progressed. The Carrom Board competition was not short of action as the men with nerves of steel pocketed the coins with ease. The Annual Sports Day was held on 16.06.2016. All the winners of the team and individual events were awarded medals and certificates. The Centaurs team won the overall championship trophy.

Sports secretaries
Shreedher Priyan and Reshma Shanmugam





World Lupus Day

UPUS or SLE- (systemic lupus erythematosus) is one of the commonest autoimmune diseases affecting young women of child bearing age. It is a multisystem disease and if untreated, it can cause significant morbidity and mortality. World lupus day is celebrated on 10th May all over the world, in order to raise awareness among the public, patients and doctors.

The Rheumatology department of Velammal medical college hospital had conducted quiz for Medical students on SLE on 5th May and Dr Subramanian, Rheumatologist and Prof Dr Chandrasekhar, HOD Medicine presided over the prize distribution. Prizes for the winners Jeya Harini and Sree Dhanya and all the other participants were sponsored by IPCA. Subsequently Dr. Chandrasekar, Dr. Subramanian and Dr. U. Pallavi Rathi Vanthitha and Dr. R. Gnanasekaran (Dermatologist) discussed with the patients about SLE and also responded to their queries and concerns. There was a family meet too, which little children of patients with SLE attended. Dr. Subramanian thanked all for participating in the Lupus day meet.

World Scleroderma Day

World Scleroderma day is celebrated on 29th June every year all over the world, in order to raise awareness about this rare disease and its impact on daily life. We campaign for a world in which equal rights and treatment are given for all patients with scleroderma. This is an article to make ourselves aware of the ever increasing burden of this autoimmune disease.

Systemic sclerosis (SSc; Scleroderma) affects the skin and multiple internal organs leading, eventually, to fibrosis. SSc is a clinically heterogeneous, multi-system autoimmune disorder. Patients with SSc may have inflammation, micro vascular disease and fibrosis affecting the skin, oesophagus, respiratory tract, kidneys and other target organs.

Scleroderma is an autoimmune condition, which means the body attacks its own tissues. The connective tissue under the skin and organs gets involved resulting in scarring and thickening. The skin may be affected by few oval patches. Other symptoms are based on the different internal organs involved. They can be controlled but cannot be cured.

Disease prevalence: Onset of systemic sclerosis is highest in the fourth and fifth decade of life and is 4 times more common in women compared to men. Children are rarely affected, and only around 10% of children with scleroderma develop systemic sclerosis. This is not linked to race, season, geography, occupation or socioeconomic status.

Causes: Normally the body's immune system attacks any bacteria and viruses that infect the body by releasing white blood cells into the blood and destroys the germs. It is thought that scleroderma occurs because part of the immune system has become overactive and out of control. This causes too much collagen production from the connective tissue causing fibrosis of the tissue. It is not clear why this happens to people with scleroderma.

Symptoms: In this condition, patients may have heart burn, difficulty in swallowing, puffy fingers and sausage like swelling with tight skin (facial skin around the mouth too). Other symptoms may include hair loss, fatigue, joint pain, weight loss, and red spots on the skin. Based on the extent of skin involvement three different types have been described- diffuse cutaneous sclerosis (dcSSc), limited cutaneous sclerosis (lcSSc) and SSc sine scleroderma (no skin involvement).

One form is limited to skin and often starts with Raynaud's phenomenon (cold fingers and toes), other symptoms include red spots in skin and lumps of calcium underneath the skin (finger tips). The other form is diffuse pattern with symptoms all over the body and involving many internal organs. There is a rare variant where no skin involvement occurs but only organs are affected.

Tests: Blood investigations like blood count, ESR, CRP, liver and kidney function tests, urine PCR, ECG, chest x-ray and ANA profile are commonly used to confirm this disease.

Treatment: The aim of treatment is to relieve the symptoms and prevent any complications from the disease and minimize disability. If symptoms are severe, then surgery may be needed. The cutaneous telangiectasias can be treated. Pulsed dye laser (PDL) and intense pulsed light (IPL) may be used, both being effective, although the former produces a better cosmetic result. Different medications may be needed to control the disease such as corticosteroids in low dose, vasodilators to improve blood flow to the peripheries, cyclophosphamide to improve the lung function and to stabilise the lung fibrosis, warfarin and oxygen in pulmonary hypertension and analgesics to reduce the pain and swelling in the hands.

Historical information: The relationship of scleroderma to Raynaud's phenomenon was first described by Maurice Raynaud himself in 1865 and was a well accepted association by the turn of the century. In 1945, Goetz proposed the term progressive systemic sclerosis based on his detailed review of the visceral lesions. Acceptance of the syndrome of limited scleroderma followed Winterbauer's 1964 description of what subsequently became termed 'CREST syndrome' (Calcinosis, Raynaud's phenomenon, Esophageal dysmotility, Sclerodactyly and Telangiectasia)

What do our patients need?

"Our patients need hope, courage, strength, faith, love and patience"

Author

Dr. N. Subramanian, MBBS, MD, MRCP (UK), MRCP (Rheumatology CCT), FRCP (Edin)

Assistant Professor of Medicine,

Velammal Medical College Hospital and Research Institute, Madurai.

World Schizophrenia Day – May 24

Schizophrenia is a disabling, chronic psychiatric disorder that poses a significant burden both on patient and their families. The treatment costs, frequent hospitalisation, disturbance of routine work, shame, embarrassment, feelings of guilt and self-blame lead to caregiver burnout. The disease can be controlled well through medications and psychosocial interventions. Such interventions, when started early, can prevent deterioration and elicit good treatment response. However, the local explanatory model of mental illness is predominantly "magico-religious". This leads to delay in seeking medical treatment or continuing drugs which in turn worsens the treatment response and prognosis.

Schizophrenia Awareness Day is observed worldwide on 24th May. It is an annual event that provides an opportunity to mental health professionals to raise community awareness about schizophrenia and mental illness in general.

Marking the World Schizophrenia Day, the department of psychiatry conducted a Schizophrenia awareness programme on May 24, 2016. The beneficiaries were around 100 patients with schizophrenia along with their families. The chief guest for the day was Dr. Sivasangari, Psychiatrist, District Mental Health Programme, Madurai. The Head of the department of Psychiatry Dr. V. Ramanujam inaugurated the function through his welcome address and introduced the chief guest. Dean, Medical Superintendent of VMCH&RI, Director of Medical Services, Velammal Specialty Hospital and several faculty members of various departments graced the occasion.

The patients were educated about schizophrenia through an educative documentary film, information leaflets and the chief guest's speech. The patients' doubts and misconceptions regarding disease model, treatment continuation, drug side effects, marriage issues and prognosis were addressed in a one-to –one interaction with the chief guest.

At the end of the program 4 patients and families who were consistent in continuing medical treatment and maintaining their work routine in spite of all odds were recognised and awarded.

The program was followed by lunch for all the beneficiaries arranged by the department of Psychiatry, VMCH&RI.

Dr. V. Ramanujam,
Professor, Department of Psychiatry, VMCH&RI

BETTER HEARING, BETTER LIVING

We are proud that our ENT department has grown a lot having advanced technology with full fledged audiological facilities. We are presently having well equipped audiological department with fulltime qualified audiologist. Our aim is "to provide better hearing for better living''

We are having the following facilities in our ENT department:

Puretone audiogram, Impedance audiometry , Otoacoustic emission (OAE), Brain stem evoked response audiometry, Speech and swallowing therapy.

Pure Tone Audiometry

It is a subjective test which helps to assess the hearing acuity. It gives information about the quantity and quality of hearing loss, degree of handicap and is also helpful for prescribing hearing aid.

Impedance Audiometry

It measures the integrity of the middle ear system. It is an objective test that helps to know the specific conditions of the ear like otitis media with effusion, eustachian tube insufficiency, otosclerosis, ossicular deformity etc.

Otoacoustic Emission (OAE)

It was first described by David Kemp in 1978. Otoacoustic emissions are sounds given off by the inner ear when the cochlea is stimulated by a sound. When sound stimulates the cochlea, the outer hair cells vibrate. The vibration produces a nearly inaudible sound that echoes back into the middle ear. The sound can be measured with a small probe inserted into the ear canal. People with normal hearing produce emissions. Those with hearing loss greater than 25–30 decibels (dB) do not produce these very soft sounds.

The primary purpose of otoacoustic emission (OAE) tests is to determine cochlear status, specifically outer hair cell function. It is noninvasive, objective and more accurate. It takes less than 3 minutes.

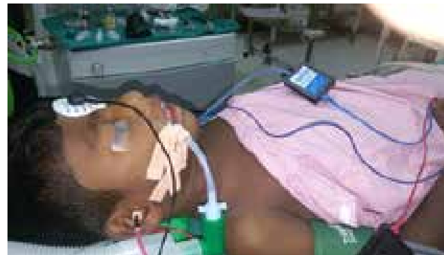
Uses of OAE

- These are very useful in screening of neonates and high risk infants for hearing loss.
- To diagnose central processing auditory disorder like auditory neuropathy.
- To differentiate cochlear from retrocochlear pathology.
- To detect early changes in ototoxicity and noise induced hearing loss.
- To identify Malingerers.

BERA (Brain Stem Evoked Response Audiometry or Auditory Brain Stem Response)

Definition: BERA is an objective way of eliciting brain stem potentials in response to audiological click stimuli. These waves are recorded by electrodes placed over the scalp. This investigation was first described by Jewett and Williston in 1971.

Procedure: The stimulus, either in the form of clicks or tone pipe, is transmitted to the ear via a transducer placed in the insert ear phone or head phone. The wave forms of impulses generated at the level of brain stem are recorded by the placement of electrodes over the scalp. It requires that the patient remains quiet during the examination. It can also be done on sleeping or unconscious patients.



Uses of BERA:

1. It is an effective screening tool for evaluating cases of deafness due to retrocochlear pathology i.e. (Acoustic schwannoma). An abnormal BERA is an indication for MRI scan.
2. Used in screening newborns for deafness.
3. Used for intra-operative monitoring of central and peripheral nervous system.
4. Diagnosing suspected demyelinating disorder.
5. To detect malingerers.

BERA has 90% sensitivity and 80% specificity in identifying cases of acoustic schwannoma. The sensitivity increases in proportion to the size of the tumor.

Criteria for screening newborn babies using BERA:

1. Parental concern about hearing levels in their child
2. Family history of hearing loss
3. Pre and post natal infections
4. Low birth weight babies
5. Hyperbilirubinemia
6. Cranio facial deformities
7. Head injury
8. Persistent otitis media.

OAE & BERA are mandatory prerequisites for cochlear implant.

Hearing aid fitting

We are offering services like fitting of free hearing aid under the Governmentt insurance scheme.

Fitting of hearing Aid in a child

Live Better With Better Hearing! Live With Dignity!

Early Diagnosis, Early Treatment, Early Rehabilitation!

Dr. S. Maheswaran, MS., DLO,
Assistant professor,
Dept of ENT, VMCH$RI, Madurai.

NURSES DAY CELEBRATION

Velammal medical College Hospital fraternity celebrated the Nurses Day, the fourth since the inception of VMCH & RI, on 12th May, 2016. The matron Mrs. Maheswari welcomed the dignitaries and the august audience. The chief guest for the day was Kalaimamani Mr. Sugisivam. Chairman Sri. M.V. Muthuramalingam presided over the function and delivered the Presidential address. This was followed by felicitation addresses by the Vice Chairman Dr. S. Asokan, Dean, Dr. R. M. Rajamuthiah, DMS, Dr. P. Selvakumar, & Medical Superintendent, Dr. S. Somasundaram.

The chief guest motivated nurses through his powerful speech quoting inspiring examples. He also distributed prizes to people those who had excelled in various domains of nursing.

Nurse's pledge was delivered by Mrs. Jemima, Nursing superintendent. This was followed by a delightful cultural programme by the nurses of VMCH&RI. The grand event came to end with the vote of thanks by Nursing superintendent, Mrs. K. B. Nandhini.

CONGRATULATIONS WELCOME TO VELAMMAL FAMILY

Dr.Jeyakumar,
Biochemistry, Assistant Professor

Dr.Jeya Chandran S,
Anaestheiology, Senior Resident

Dr.Shanofer M S
Dentistry, Tutor

Dr.Midun Chandar K C,
General Medicine, Senior Resident

Dr.Manish Kumar,
ICU, Assistant Professor

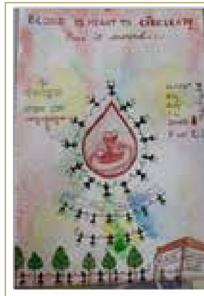
Chandralekha B,
Library, Asst.librarian

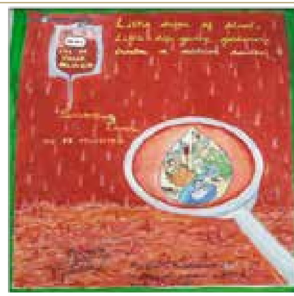
Dr.Senthil Kumar M,
Radiology, Senior Resident

Dr.J.Madhusudhanan
Gastrointestinal & Hepato-Pancreatico-Biliary Surgery, Consultant

John Lucy Mary X,
Nursing, Nursing Superintendent

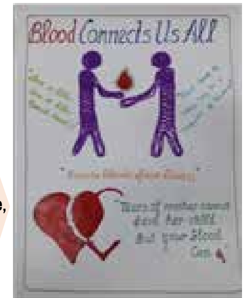
Prize winning posters of poster competition held on World Blood Donor Day





1st Prize
Contributed by - Hareni M and Keerthiga
II year MBBS

2nd prize
Contributed by
M Ezhilmathi, J Jefflin, Herminie, J S Manimozhi, A Sowmiya, A Snolin Shiromi
III yr MBBS



3rd prize
Contributed by - M Abirami, N Adhithya, Ajinya John, S Aishwarya
II yr MBBS

3rd prize
Contributed by
Priya Dharshik S, Santhoshi S, Suvetha M
III yr MBBS

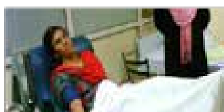
Consolation prize
Vinodh Kumar R,
II yr MBBS

Voluntary blood donors of Velammal donor club

I year students:
Mr. Nirmal
Ms. Aarthy
Ms. Harshini

II year students:
Ms. Tamilnila
Mr. Vinodh
Mr. Sethuraman
Mr. Aravind
Mr. Gokul
Mr. Mohan surya
Mr. Kavin
Mr. Om Prakash
Mr. Tharun Kumar

III year students:
Ms. Dhanushreeparvathi C
Ms. Kiruba S
Mr. Prathab
Mr. Sundaravel S P
Mr. Surjeet Aacharya
Mr. Vidyapathi V
Mr Madhan C
Mr Premnath VS
Mr Ramkumar N
Mr Muthukumaran G
Mr Arunkumar



Ms. Aarthy,
1st MBBS donating blood

Prize winners of essay writing competition "Stress and Medical Professionalism"

held on 18th June 2016

Sowmiyaprabha S.
1st place

C. Madhan
2nd place

Sowmiya A.
3rd place

BIRTHDAY BASHES

JULY

1 **Dr. D. Sriramulu**, Nephrology
2 **Dr. V. Ramar**, Orthopedics
Dr. Jalpesh Kapuriya, Anesthesiology
3 **Dr. C. Shanmugam**, Emergency Physician
4 **Dr. M. Angu Vijayam**, General Medicine
Dr. M. J. Murali Kannan, General Surgery
7 **Dr. U. Zeenathul Bazaria**, JR
8 **Dr. S. Vedha**, Anatomy
10 **Dr. C. Sivagami Sundari**, Gynecology
12 **Dr. R. Malarvani**, Community Medicine
13 **Dr. GopiNallaiyan**, Pediatric Cardiac Surgeon
14 **Dr. N. Padmavathi**, JR
15 **Dr. C. Asad Gowri Mukundan**, JR
16 **Mr. Ramkumar**, Anatomy
17 **Dr. H. A. Rieyaz**, Anatomy
22 **Dr. N. S. Mani**, Radiodiagnosis
23 **Dr. M. Krishna Kumar**, Orthopedics
25 **Dr. Samir Bele**, Community Medicine
27 **Dr. S. Karuppaswamy Prakash**, Respiratory Medicine
Dr. R. Balaji, Orthopedics
29 **Dr. G. Mathevan**, Pediatrics
Dr. R. Deepa Vinitha Rani, Ophthalmology
Dr. R. Antony Arockia Vinoth, JR

AUGUST

1 **Dr. R. M. Sathish Kumar**, General Surgery
3 **Dr. M. Saravanan**, Pediatrics
4 **Dr. R. Ganesan**, General Surgery
7 **Dr. N. Uwaraj**, Emergency Physician
10 **Dr. S. Dhivya**, Pediatrics
11 **Dr. S. RajaSankar**, Anatomy
13 **Dr. V. Sandhya**, General Medicine
14 **Dr. C. Karpagavel**, Surgery
Dr. J. Mohan, Pharmacology
16 **Dr. L. Ramya**, JR
17 **Dr. M.Ranisolai**, General Medicine
18 **Dr. S. Yogaraj**, Radiodiagnosis
19 **Dr. A. Ramesh**, Microbiology
Dr. R. Sakunthala, Dermatology
20 **Dr. Sabita Singh**, Anatomy
22 **Dr. S. Rajarajeshwari**, Gynecology
24 **Dr. B. Renuka Devi**, Gynecology
25 **Dr. P. Ramadevi**, Anaesthesiology
26 **Dr. A. S. Krishnaram**, Dermatology
Dr. T. Karthik Raj, Pediatrics
29 **Dr. P. Sasikala**, Anatomy
31 **Dr. T. Arunprasath**, JR

SEPTEMBER

2 **Dr. Nisha**, Anesthesia
Dr. Vinoth, JR
5 **Dr. R. V. A. ArthyJeya**, JR
9 **Dr. P. Raj Kumar**, JR
10 **Dr. K. Nalanda**, Orthopedics
Dr. R. Narendranath, JR
11 **Dr. S. A. Rizwan**, Community Medicine
Dr. N. Nivethitha, JR
15 **Dr. A. C. Arun**, General Medicine
16 **Dr. R. Anandha Kumar**, General Medicine
17 **Dr. A. Nafeeya**, JR
Dr. T. Kavitha, JR
18 **Dr. Laxmi. C.** C, Physiology
Dr. A. Dhanyan Harshidan, ENT
21 **Dr. M. Gopinath**, General Surgery
Dr. M. VijayAnand, Anesthesia
24 **Dr. G. Saravana Kumar**, Radiodiagnosis
Dr. A. M. Kousik, JR
29 **Dr. M. Mithran**, Orthopedics
Dr. S. Janani, JR

VELAMMAL BLOOD DONOR'S CLUB

Activities

a. Reconstitution of donors' club

Velammal Blood Donors' club is a voluntary club reconstituted with the involvement of MBBS students, Allied Health sciences students and Paramedical staffs under the co-ordination of Dr. Samir Bele, Professor and Head of Community Medicine and Dr. Setthuammal, Blood Bank Medical officer of Velammal medical College Hospital. The aim of Blood Donors' club is to provide quality blood donor services and care through building and maintaining a safe, sustainable voluntary blood donor base. Strategies are to respond to emergency calls from the hospital by identifying student donors of specific blood groups for blood donation, to conduct blood donation camps inside the college campus to motivate and enable new blood donors and finally to create awareness and motivate the community regarding blood donation.

b. Sensitization workshops

To facilitate enrollment, to clear misconceptions and to improve the knowledge regarding blood donation, sensitization workshops were conducted for MBBS students and paramedical staffs. World Blood Donors' day was celebrated on 14th June, 2016. The first Sensitization workshop for paramedical staffs was conducted at 3rd floor Hospital auditorium on the same day. Dr Dhaval Mahadevwala, Associate Professor, Community Medicine delivered the welcome address. Dr Samir Bele, Professor and Head, Dr Trupti Bodhare, Professor and Dr Denesh, Statistician, presented bouquet to the dignitaries. The event was inaugurated by our honourable Vice-chairman - Dr S.Asokan, Dean - Dr Rajamuthaiah,, Medical superintendent - Dr Somasundaram, Director of Medical Services - Dr. P.Selvakumar. This was followed by prize distribution to the winners of poster competition. Dr Praveena Daya, Asst. Professor, Community Medicine delivered the sensitization lecture. Around 400 staffs were sensitized. Enrollment forms were circulated and those who volunteered for blood donation were registered as members for Blood donor club. Their contact details, information regarding blood group and few other details regarding their eligibility to donate blood are maintained in the online data base. The remaining paramedical staffs will be covered batch wise subsequently.

c. Communication

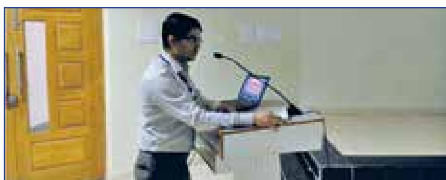
To ensure proper communication within the organizational members, a What's app group and a Facebook page was created by Mr. Venkatesh, II year MBBS student. In case of emergencies, executive members in the donor club will be informed by the Blood bank members regarding the need for specific blood group. With the help of online data base developed for registered members, the eligible donors will be listed out. They will be communicated immediately and arrangements will be made for safe blood transfusion. Creation of Website link page for Velammal Blood Donor's club is underway. Henceforth, people who volunteer to get registered as members can contact us through the contact details provided in the website page. They can also register themselves directly through the registration page provided there.

d. Poster competition for students

On the occasion of World Blood Donors' Day, we organized a poster competition on blood donation for MBBS and Allied Health Sciences students on 13th June. MBBS students from all the three years participated actively. Winners for first, second and third prizes were selected by the faculty of Community Medicine on the same day and prizes were distributed the next day on the event of celebration of World Blood Donor's day at Hospital 3rd floor auditorium.

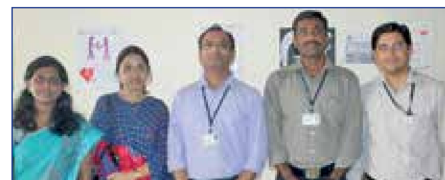
e. Other activities

Enrollment form for donor club was prepared and the sensitization lectures for MBBS students were planned and conducted. Following the sensitization, enrollment forms were circulated among MBBS students and those who volunteered to register as donors were enrolled as members of the club. Data base i.e excel sheet containing all the information regarding the blood group, eligibility details and contact details of the registered members is being prepared by Dr. Denesh. Till date, nearly 300 persons, including students and staffs from Velammal family have enrolled themselves into the club. After sensitization, volunteers were called from students for being a part of organizational structure of Velammal Blood Donor's club. About 30 MBBS Students from all the three years volunteered, and executive members were selected by the faculty to fill the available posts. Dr. Praveena monitored the day to day activities of the Blood donor club.



Welcome address by Dr Dhaval Mahadevwala

Prize distribution by Dean Sir



Organizing team

Prize distribution by Dr. S. Asokan, Vice Chairman, VMCH

Lecture by Dr. Praveena Daya

Report by:
Dr Praveena Daya A, Assistant Professor,
Deptartment of Community Medicine,
VMCH&RI, Madurai.

"Kumbhabhishekham"

Arulmigu Velmurugan Temple Consecration at the Velammal Medical College Hospital campus on 19/05/2016

"World Health Day"

Rally by Velammal Medical College Hospital and Research Institute, Madurai

உலக சுகாதார தின விழிப்புணர்வு ஊர்வலம்

World Health Day observed in city

Staff Reporter

MADURAI: Many healthcare institutions here on Thursday observed World Health Day, for which the World Health Organisation had declared 'Beat Diabetes' as the theme for this year.

Students from Velammal Medical College Hospital and Research Institute and Velammal School took out a rally from Velammal School at Tiruppuvanam to old taluk office to create awareness of diabetes. Chairman of Velammal group of institutions M.V. Muthuramalingam flagged off the rally in the presence of Vice-Chairman S. Asokan.

A health camp was also organised at the institute's Rural Health and Training Centre at [illegible]. A quiz competition on diabetes was also organised for students. Apollo Speciality Hospitals in Madurai inaugurated Apollo Obesity and Metabolic Rehabilitation Clinic at the hospital on World Health Day.

Its Chief Operating Officer Rohini Sridhar said that the new clinic would offer comprehensive care from various specialities in an attempt to tackle obesity, one of the major public health problems now.