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KMCH Touch

Quarterly News Journal of Kovai Medical Center and Hospital

EXCELLENCE IN HEALTH CARE 27 1990 - 2017 KMCH

Why Are We So Passionate About Stroke?

From Mechanical clot removal via Angio, to the latest in MRI's and a Mobile Stroke CT on wheels, how the convergence of technologies will allow us to change stroke management as we know it.

Message From Executive Director

Why We Are Passionate About Stroke

In 2016, the AHA/ASA changed its guidelines to allow modern mechanical thrombectomy or clot removal . KMCH formulated its "code stroke" protocol and worked for months to bring down the speed of treatment from the time the patient steps into the entrance of the ER. We average now, 7 minutes for a door to CT time for the last 6 months and the recovery by the patients has been fantastic (equal to International standards). However, the vast majority of our patients come in too late . Problematically, some doctors (not in ER or neuro department), even in our own institution, were not aware we can now removal of clot with interventional radiology

It reminded me of a story of an intracranial aneursym that showed up to our Erode center a decade ago. The newly hired JMO in the ER at night saw the patient and told him that the only in Chennai can they fix complicated aneurysm endovascularly and if he doesn't get there , he will die . The patient left went to 2 other hospital ERs before and ER doctor told him KMCH main center is the only one that fix the aneurysm endovascularly (at that time). That patient came in shouting at us . That taught me that most of India's ER management (and now stroke management) depends on the knowledge level of JMOs.

After the launch of the Mobile Stroke Unit with press release with full paper ads and the Coimbatore collector cutting a ribbon, I tested our managers and nurses to see if they understood what a mobile stroke unit is and when do you call for it. Less then 50% knew . Getting people to realize what stroke is and we can now do an angio to remove clots will be a huge public education task which will take years. In order to do this, we must be passionate. As passionate as the cardiologists who pioneered STEMI programs . To not be passionate will let countless patients undergo permanent neurologic damage. As India ages , stroke will rise up the ranks of causation of mortality and cause of disability. Lets not wait.

Dr Arun N Palaniswami
Executive Director

Editorial Board

Belated New Year Wishes to all.

It is exciting times for KMCH and our allied Institutions with the news of KMCH Institute of Health Sciences and Research Institute in our premises. There has been huge progress over the last few months with the setting up of Mobile Stroke Unit, Molecular Genetics Center and many others as you will see this Issue.

We hope you enjoy this edition and as usual, send us any feedback to drkrishnanswaminathan@kmchhospitals.com, We are excited for year 2018.

On behalf of the editorial board, I extend my warm greetings for a Prosperous 2018.

Dr. Krishnan Swaminathan MD FRCP (Edin)

Editor & Publisher
Dr. Nalla G Palaniswami
Chairman

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Dr. Arun N Palaniswami - Executive Director
Dr. Krishnan Swaminathan - Consultant Diabetologist & Endocrinologist
R. Narayanan - Senior - General Manager - Marketing

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Governor lays Foundation Stone for Future Medical College

Thiru. Banwarilal Purohit, Hon'ble Governor of Tamil Nadu, laid the foundation stone for the KMCH Institute of Health Sciences and Research and addressed the gathering on 20th March 2018, In Presence of Dr.Nalla G Palaniswami, Chairman, KMCH. Dr.Thavamani D Palaniswami, Vice Chairman, KMCH. Dr.Arun N Palaniswami, Executive Director, KMCH. Dr.V.Kumaran, Dean, KMCH.

CONVERGENCE OF 3 TECHNOLOGIES

The Mobile Stroke Unit

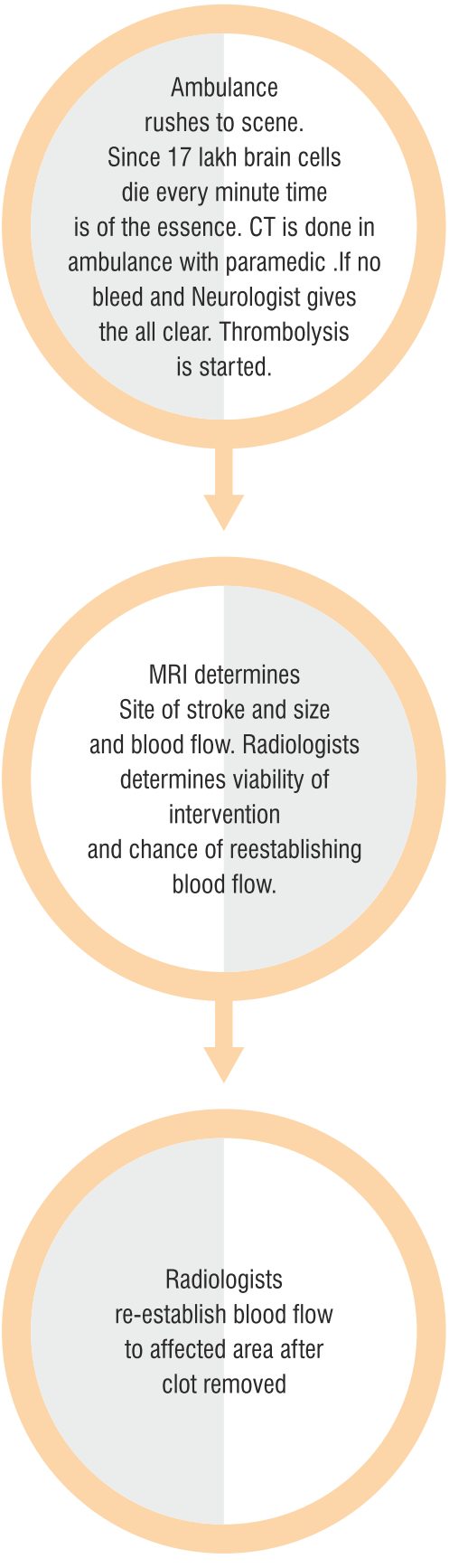
- Pioneered in Germany in 2011 with subsequent units in US from 2014 onwards, the mobile stroke unit is a CT ambulance on wheels.
- Since every minute 19 lakh brain cells die and we cannot start treatment till we have a CT , the CT is kept in the ambulance
- In Germany , the Mobile stroke CT results
- KMCH has launched the first one in Asia with hopes of getting to the patient faster.
- Patients from their home or nursing homes without CT can call the Stroke Hotline

3T MRI

- We can go in and remove the clot but how are we sure it will make a difference?
- We can now use the MRI to reasonably assess the damage the stroke has done and the blood flow tot hat area
- If we revascularise the areas which have some mild blood flow though collaterals and not much damage is done we can remove the clot upto 24 hrs
- Conversely if we see a horrible stroke with no blood flow and a lot of damage on the MRI, we need not even intervene even if it is in the 3 hour window
- Strokes of unknown time frames like “wake up” strokes are now treatable

Mechanical Clot Removal Via Brain Angio

- The American Heart Association /American Stroke Association updated their recommendation for 2018, for acute ischaemic stroke , appropriate stroke candidates should receive Iv Tpa and mechanical thrombectomy as soon possible
- Time Limits:
- Upto 3 ½ hours for ischaemic stroke , pharmaceutical therapy alone
- Upto 6 hours , brain angio with mechanical clot removal device
- Upto 24 hours , brain angio with mechanical clot removal device only after MRI identifies patient is a good candidate.



Inside Asia's First Mobile Stroke Unit

KMCH has launched Asia's First Mobile Stroke Unit (MSU)

Where did the idea of MSU originate?

Idea of MSU originated in Germany and subsequently Implemented in the United states and Australia. Currently, we can proudly say that KMCH has brought it first to Asia and India.

What are these mobile stroke units/ambulances?

They are special ambulances equipped with in built CT scanner and specific point of care laboratory testing along with specialist medical and paramedical personnel designed to accelerate the diagnosis of acute stroke and shorten time taken to administer thrombolytic therapy for ischemic strokes.

What is your stroke helpline no?

Our hospital stroke helpline is +91 95665 95665.

What is workflow for mobile stroke unit?

As soon as our hospital stroke call helpline gets activated, MSU is dispatched towards its origin and if patient is already in transit, asked to meet midway. CT scan for patient is done as soon as patient is taken inside MSU and if its hemorrhagic stroke, appropriate medical management (BP control) is given while for ischemic stroke patients, thrombolytic therapy is initiated while in transit to hospital itself.

How are patients benefitted by them?

Limited studies to date have shown that time taken to administer thrombolytic therapy shortened by 15 to 42 minutes as compared to standard care. It also improved the utilization of thrombolytic therapy from <10% to more than 30-50% among eligible patients.Thus, having mobile stroke unit ensures more patients receive standard of care treatment as fast as possible. Every minute ischemic stroke patient is denied thrombolytic therapy, nearly 2 million neurons get damaged and reduces the possibility of good outcome.

What is thrombolytic therapy?

It is the only FDA approved drug used to dissolve clots causing acute ischemic stroke. It can be administered inside our MSU after point of care testing and excluding other contraindications. It has maximum benefit if administered within 3-4.5 hours of onset of stroke and earlier treatment is initiated, better are clinical outcomes. In USA, 70 percent of patients were treated within 90 minutes of symptoms including 40 percent in the first hour after introduction of MSU, compared to <1% of hospital-treated stroke patients being treated in the first hour.

What are latest advances in stroke treatment?

In last couple of years, advanced endovascular treatment has gained widespread popularity ever since highly successful and positive trials were published. Endovascular treatment has become the standard of care especially for patients with large vessel occlusion (LVO). MSU favors the early diagnosis of such patients through clinical (increased severity of stroke) and imaging methods (hyperdense vessel). These patients can be directly shifted to DSA catheterization lab for emergency endovascular treatment available 24 x 7 in our hospital.

Who will be personnel involved with our MSU?

Our MSU will involve EMS driver, stroke nurse, CT technologist and physician who can provide 24x7 emergency stroke care services in and around Coimbatore.

What will be coverage area for our MSU with respect to golden period for Stroke?

We initially plan to cover approx. 150-200 km around Coimbatore since golden period for stroke is within 3-4.5 hours of onset of

stroke. However, with expanding interventional endovascular stroke treatment, these time window can be expanded to nearly 16-24 hours. Selected patients can be treated even beyond the usual time window using advanced imaging facilities available at KMCH.

What should be general public need to know about stroke and in particular, MSU?

TIME IS BRAIN and Stroke is best treated as FAST as possible. With MSU, we bring state of the art lifesaving treatment to doorstep of stroke patients and we hope to FIGHT STROKE BEFORE IT STRIKES YOU.

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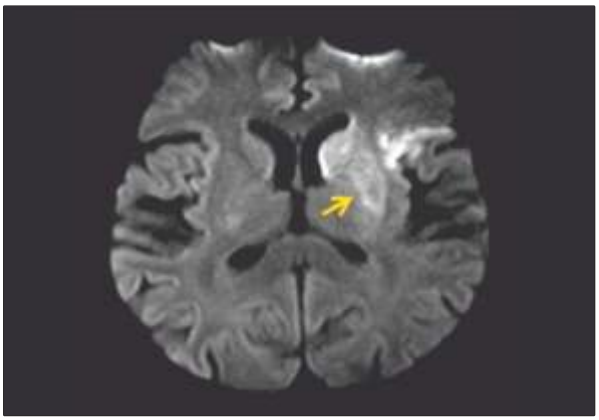
Case Report : Ischaemic Stroke

68 years male patient presented with history of right sided weakness and difficulty in speech since past 3 hours. He had experience giddiness followed by fall 1 hour without associated weakness prior to current episode. On examination, patient had dense right hemiplegia (upper and lower limb power 0/5) with dysarthria. Provisional clinical diagnosis of stroke (CVA) was made and patient underwent emergency neuroimaging (CT scan followed by MRI).

CT Brain revealed left middle cerebral artery (MCA) territory hyperacute infarcts and subsequent MRI confirmed left MCA territory infarcts involving few areas (ASPECTS 5/10) while MR Angiography showed occlusion of left cervical internal carotid artery (ICA) just beyond its bifurcation as well as thrombotic occlusion of left MCA (proximal segment).



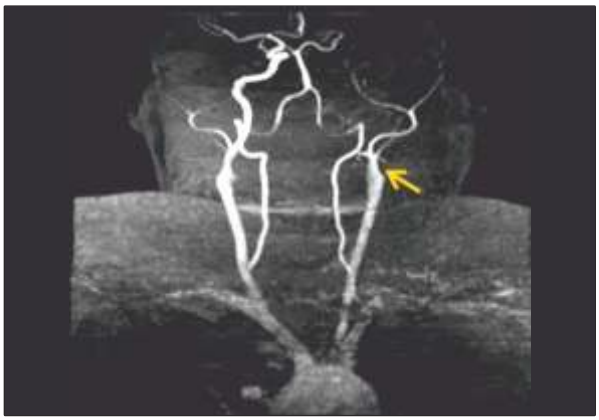


Fig 1a - Axial Diffusion weighted MRI image shows hyper acute infarct involving the left basal ganglia and adjacent cortex (anterior insula)Fig 1b - TOF MR angiography of the neck vessels show occlusion of the left internal carotid artery from origin with no flow in the left middle cerebral artery territory.

Fig 2a and b - Digital subtraction angiography - AP and lateral views - left common carotid injection showed occlusion of the left ICA from origin.

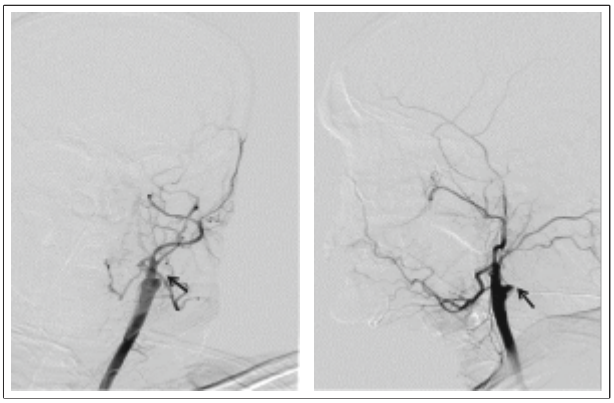
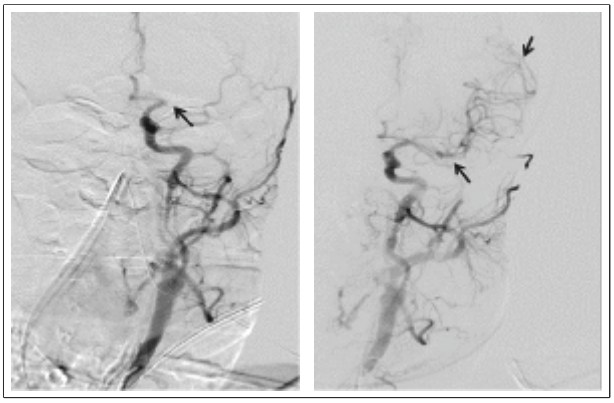


Fig 2c - Post 1st Suction thrombectomy - Left ICA recanalised with tandemocclusion in the left MCA M1 segment. Fig 2d - Final post procedure angiogram showed complete recanalisation of the left MCA territory.



It was decided to counsel the patient relatives for emergency mechanical stroke treatment (endovascular thrombectomy/aspiration) in view of large vessel tandem occlusion (ICA in neck and MCA within brain) even in presence of MCA territory infarcts to prevent infarct growth and avoid decompressive craniectomy as area supplied by occluded vessels (tissue at risk/penumbra) was much larger than area of established infarcts. Patient was shifted to DSA catheterization lab where his femoral artery was punctured and accessed with arterial sheath. Guide catheter was placed in left common carotid artery CCA and small balloon was taken across occluded segment of left ICA in order to dilate the narrowed vessel. Guide catheter was then taken into ICA and clots within ICA were aspirated. Large bore intermediate aspiration catheter was then taken over microwire into left MCA and clot in left MCA was then aspirated. Procedure was stopped once adequate distal revascularization of MCA was established with filling of its major branches on angiographic injections. Patient was kept in ICU overnight where immediate improvement in right lower limb power was noted and his speech difficulty gradually improved over next few days. Repeat neuroimaging revealed no significant progression of his left hemispheric infarcts. Patient had significant improved lower limb power (4/5) as compared to his initial presentation with improvement of upper limb power (2/5) and speech difficulty after 1 week following his stroke.

This case report illustrated importance of early diagnosis in stroke as well as need for advanced neuroimaging and intervention facilities in order to provide best chance for clinical improvement even in presence of established infarcts and major vessel occlusion.

Benefits of treatment are even more significant if early diagnosis is made and intervention (thrombolysis or mechanical endovascular treatment) is initiated as early as possible before tissue damage. This patient presented to our hospital within 3 hours, 20 minutes of stroke and initial imaging diagnosis was established within 15 minutes of patients' arrival in hospital. Patient was taken to DSA lab and door to puncture time was 60 minutes and reperfusion was established within additional 50 minutes. Current guidelines recommend that endovascular treatment be initiated within 6 hours of onset of stroke for best possible outcomes. However, they can be effective in selective patient population even till 24 hours based on advanced imaging modalities like perfusion.

Over the last 2 years, nearly 47 patients have been treated with endovascular stroke therapies at our hospital and nearly 70% of our patients have had good outcomes following treatment. Increased public and physician awareness will ensure more eligible patients are brought within time to avail this endovascular treatment and reduce long term morbidity following stroke.

Congratulations

Dr. M. Dhiwakar, Consultant ENT & Head and Neck Surgeon

On articles published on

Occult invasion of sternothyroid muscle by differentiated thyroid cancer

In

Publication of original research in international peer-reviewed journal.

First Time Combined Pancreas and Kidney Transplant at KMCH

Dr. Nalla G Palaniswami - Chairman, KMCH with the Patient who underwent "First combined Pancreas and Kidney Transplant at KMCH" Along With (Left to Right) Dr.A.N. Murugan - Medical Director, KMCH, Dr.Arun N Palaniswami - Executive Director, KMCH, Dr. S. Vivekanandan - Liver Transplant and HPB Surgeon, KMCH. Dr.Mangalakumar - Nephrologist, KMCH. Dr.V.Kumaran - Dean, KMCH.

Diabetes mellitus is the leading cause of kidney failure worldwide. Patients with end stage kidney failure will need dialysis as a life saving measure. However, remaining on dialysis especially with diabetes mellitus will have huge impact on their health and longevity. More than 40% of patients with diabetes and end stage kidney failure die in 5 years. The best treatment option to improve their survival is kidney transplantation. Diabetes mellitus is due to the lack of sufficient production of insulin from Pancreas which is present in the center of the abdomen and helps with the digestion food and also produces insulin to control blood sugar. Damage to pancreas will cause insulin deficiency and diabetes mellitus.

Mr Kumar 29 (Name changed) from Salem suffering from Type 1 Diabetes since early age was also suffering from end stage kidney failure along with retinopathy and neuropathy who was undergoing Hemodialysis and on high dose of insulin, The doctors team decided Combined Pancreas and Kidney transplant will be the only option left. Mr Kumar got organs thru a brain dead patient DrMangalkumar, Consultant Nephrologist and DrVivekanandan, Consultant Liver Transplant and HPB surgeon performed the First successful Combined Pancreas and Kidney transplant at KMCH.

The transplanted organs started functioning well and for the first time in Mr Kumar's life his diabetes level was normal and he won't be insulin dependent since his new pancreas started secreting required insulin by restoring the normal insulin level, The patient will no longer need to take either insulin or pills for diabetes as it is cured. Also, it will protect the patient from other complications of diabetes such as retinopathy (eye disease due to diabetes), neuropathy as well as protection of heart and blood vessels. Pancreas transplantation can be done alone in diabetic patients who do not have the capacity to recognize the low blood sugar (severe hypoglycemia unawareness). Simultaneous pancreas and kidney transplantation is common in the west but it is rarely performed in India due to lack of expertise and facility. Outside Chennai it is performed for the first time in South India.

Dr.Nalla G Palaniswami, Chairman, KMCH, appreciated Dr.S.Vivekanandan Liver Transplant and HPB Surgeon, Dr.V.Mangala Kumar , Nephrologist and the team for performing this rare procedure which was lifesaving and improved the patients quality of life, he added that KMCH has the best expertise and the latest technology to perform any kind of rare and challenging procedures in this part of the world.

Congratulations

ISCCM

Successfully Completed
CTCCM
(Certificate Training In
Critical Care Medicine)

Dr. J. Priyadarshan
MBBS., CTCCM

Dr. S. Cibi
MBBS., CTCCM

Last One Year Experience in Neurogenetics

Dr Amit speaks about his experience since stating the Genetics clinic in KMCH one year ago

Dr. Amith Kumar I V MD, MBBS., M.Sc Medical Genetics & Fellowship (R), Glasgow, AFPI and ECFMG certified Geneticist.

Physician GP with special focus in families affected with genetic dysmorphisms, chromosomal disorders, syndrome recognition, intensive care support for Metabolic Genetic and Mitochondrial Disorders, Neurofibromatosis and Muscular dystrophy support for Pediatric and Adult Neurology, Molecular Diagnosis for Fragile X and Familial MR evaluation, Endocrine Genetics cross consultations in PW, Supporting families with multiple genetic affect for prenatal diagnosis and counseling. Lectures for resident, registrars and consultant in specialty.

Here at KMCH, we write to you about a year of experience in Clinical Genetics division that was started in 2017. The division caters to diagnostic testing, prognostication,genetic counseling and prenatal diagnosis. Though we have worked on patients from most of the clinical specialties, the major inputs are from the Neurology. In specific, among a total of 170 families studied, we understand that almost 15% of Genetic patients have a Neurological disorder. In that, we have a heterogeneous spectrum presenting to us from classical DMD to very complex and clinically subtle Neurometabolic disorders. Among this group, Spinocerebellar Ataxia are a significant group that are presented to us. We have achieved molecular diagnosis in most of them and have supported the families in every way possible.

The experience for families:

a) The answer which will make both the neurologist and the patient definitive about the condition in question is achieved.

b) Exhaustive workup has been simplified by the genetic testing methods

c) The affirmation of diagnosis, reconfirmation of a diagnosis and ruling out a possible cliical suspicion is effectively achieved

d) The benefits shared by the entire family in terms of understanding the disease prognosis, understanding risks in other members, new possibilities of managements, achieving prenatal diagnosis is clearly acknowledged

To the referring physicians and Gp's

Whom to refer?

To confirm a suspected genetic diagnosis in neurology. To reassess or rule out any clinical suspicion in Neurology relevant to this domain. High risk in families with more than one affected members with similar or heterogeneous phenotype. In families with unknown mortality or morbidity from a chronic neurological illness that has evaded all regular methods in testing. For understanding recurrence risk in other members in the family. For achieving an early (16 weeks) Prenatal Diagnosis of a previously suspected or proven neurological condition in index child. Carrier screening and risk assessment of couples with a neurogenetic condition.

Acknowledgments: Dr Arul Selvan, Dr Baskar, Dr Senthil Kumar, Medgenome Labs

Congratulations

Dr. S. Rajeswari, Consultant Transfusion Medicine

On articles published on

AB para - Bombay phenotype: a rare blood group variant and its clinical significance.

In

Publication of original research in international peer-reviewed journal.

Case Report : 3 Year old Girl Presenting with Difficulty Getting Up and Leg Stiffness

Case Report: 3 Year old girl, with completely uneventful history birth history except for consanguinity in marriage but otherwise almost negligible risk for any Neurogenetic condition, presented to the hospital progressive deterioration in motor function. She had started to regress on her milestones and progressively deteriorated in motor function from difficulty in getting up and occasional stiffness in legs. Clinical examination ruled out gross hypertrophy or dystrophy of muscles, no relevant neuromotor deficiencies or any neurocutaneous markers of a serious systemic neurogenetic disease. The basic laboratory workup were not useful and did not give us any lead. On a high index of suspicion for myotonia congenita, though there was no florid manifestations of the phenotype, we decided to rule out the disorder by applying NGS(next generation sequencing technique by doing an exome study) which is a tool of molecular diagnostics.

Molecular Studies: Myotonia congenita usually has a loss of function mutations in CLCN1 gene .This is the gene encoding the protein CLCN1 that forms the CLC-1 Chrolide channel required for the normal function of skeletal muscle cells. The study confirmed an Autosomal Recessive Homozygous Genetic insult at CLCN1 Gene, Exon 15 that is a pathogenic variant established for Myotonia Congenita.

Management: The family was counseled about the diagnosis, prognosis, management option and prenatal risk assessments. The child was managed with liason between the Neurology and Genetic clinics, now planned for treatment with T.Mexiletene which is the effective drug of choice in this condition. In addition, sibling risks and extended familial screening were also advised and the family is closely followed up.

Medgenome launches Genomic Center on KMCH premises

Inauguration of MedGenome's Genomic Centre, Dr.V.L.Ramprasad, COO, MedGenome, Dr.Thavamani D Palaniswami, Vice Chairman, KMCH, Mr.Sam Santhosh, Chairman, MedGenome, Dr.Nalla G Palaniswami, Chairman, KMCH, Dr. Mathew Cherian, Consultant Interventional Radiologist, KMCH and Dr. Krishnan Swaminathan, Consultant Endocrinologist, KMCH

This facility will offer genomics based diagnostics and research solutions across various disease domains. Coimbatore, February 15th, 2018: Well renowned multi-speciality hospital Kovai Medical Center and Hospital (KMCH), and MedGenome, a global leader in genomics based research and diagnostics, announced the launch of a Genomics Center at the KMCH premises in Coimbatore. The Center was inaugurated today by Dr. Nalla G Palaniswami, Chairman, Kovai Medical Center and Hospital. The new facility will enable researchers to find novel insights into the biology of diseases. The genomics center will also empower clinicians with validated and actionable clinical information to make effective treatment decisions for their patients. Additionally, genetic counselling will be provided to patients on hereditary cancers, genetic disorders, pregnancy related issues and neurological disorders. Speaking at the launch event, Dr. Nalla G Palaniswami, Chairman, Kovai Medical Center and Hospital said, "KMCH is synonymous with providing affordable and quality healthcare to the people of Coimbatore and nearby regions. With the opening of MedGenome's genomics facility in our premises, we will be able to offer advanced genomics based solutions and enable our clinicians to provide better outcomes for our patients." Mr. Sam Santhosh, Chairman and Founder, MedGenome said, "We are proud to open our latest Genomics Center in Coimbatore and I am thankful to KMCH for believing in MedGenome's capabilities. The center will be a focal point for providing genomics research and advanced diagnostic solutions for treatment and management of various diseases." MedGenome currently offers a wide array of tests across key disease areas at its CAP certified lab in Bangalore, including Exome sequencing, Liquid Biopsy and Carrier Screening.

Perspective in Pain Management

Dr Swati Bhat is the Current Head of KMCH Pain Management Clinic

Dr Swati Bhat completed MBBS (2000-06) from Jammu University (J&K),MD Anesthesia(2008-11) Sri Ramachandra Medical College ,Chennai.Fellowship in Interventional Pain Management (2011-12), Daradia The Pain Clinic.Kolkatta. Observership in Pain management Dublin, Ireland. (2012-14) Served as specialist Anesthetist /pain management in Royal Hospital, tertiary care for cardiac and oncology ,ministry of Health. Oman).Assistant professor anesthesiology Chettinad health City.(2015-2017).

The occurrence of pain in some part of the body or the other due to some originhas become a common phenomenon. Pain is therefore an all encompassing symptom of disease affecting one's smooth and normal life. Its chronicity throws the social equilibrium out of the window and can make one totally indifferent and miserable.

Over the past three decades the speciality of pain management has grown by leaps and bounds. Scientific research on the pain pathways and its pathology , has led to better understanding of complex issues surrounding pain. Knowledge coupled with recent advances in technology have dramatically changed the face of pain management . Interventional pain management has received a specific specialty designation and the practice is represented worldwide by a plethora of pain management organizations like the IASP- International association for the study of pain, the American Society of Interventional Pain Physicians, British Pain Society, Australian pain society, ISSP -Indian society for study of pain .The everevolving art of medicine, precise diagnosis with interventional pain practice have contributed significantly towards reducing suffering, enhancing functionality and productivity for those who have acute or chronic pain.

Our society is ridden with age old beliefs and myths regarding pain, such as –pain which does not subside or undiagnosed is attributed to attention seeking syndrome and psychological factors. Another common myth is that opioids irrespective of the dose and duration cause addiction. Most people think that pain medications should be taken only when pain is severe and unbearable. While many believe that pain-killers like ibuprofen, diclofenac are the only solution for pain relief.Tolerating pain is considered a yardstick of one's strength and will power.The fact remains that poorly controlled and unrelieved pain can actually destroy not only physical health but overall personality of an individual. Disrupting the quality of life, pain makes the sufferer feel miserable over a period of time - leading to loss of social life, sleep deprivation, depression, and in severe cases even committing suicides.

Pain management deals with a wide spectrum of Chronic pain syndromes commonest being, post surgical pain, chronic neck and back pain radiating or nonradiating to other parts, intractable headaches, widespread pain patterns like fibromyalgia ,myofacial pain syndrome(MPS), post herpetic pain ,CRPS and cancer pain.

Majority of back pain related cases, can be treated with minimally invasive procedures along withmoderate exercise, medication and healthy lifestyle changes-thereby doing away with complicated back surgeries. Intervention pain medicine offers day care procedures with least disruption to normal work life of patients. Slip disc is one of the most common causes of sciatica where a jellylike material between the vertebrae leaks. This causes pressure in the spinal cord and on the nerve roots, causing neck pain or low back pain radiating to the hands or legs. Epidural steroid injection, transforaminal epidural decompressions have shown a high success rate if they are done in time. Ozone discectomy for slipped disc is a popular procedure which is least

invasive,with high success rate, little chance of recurrence and remarkably less side effects. Ozone therapy for slip disc is becoming popular as a day care procedure not requiring anesthesia and is less expensive and very safe compared to other procedures.

Approximately 10-lakh new cancer patients are diagnosed in India everyyear& many of them are in advanced stage who need only pain management. Majority of these patients complain of inadequate management of pain by their physicians, accepting it as their destiny.The most important reason is the lack of awareness among health care professionals , policy makers and the people (patients and their relatives). The common notions is that cancer pain cannot be controlled.Other contributing factors to this are the lack of financial resources, lack of infrastructure, lack of adequately trained professionals who can perform interventional pain management, fears of associated addiction and drug abuse.

Patients may not understand the disease process but freedom from pain gives an immediate sense of well being and dignity of life to anyone thereby restoring them back to a meaningful and productive life.Research has shown that effective and adequate pain control among these patients can enhance response to treatment, recovery and prolong life.While cancer pain is inevitable at some stage of the disease, 90% of the cancer pain can be controlled. When medications do not bring relief, interventionPain procedures like neurolysis, sympathectomy, and vertebroplasty should be incorporated much earlier in the pain management and treatment plan for these patients.

We at the Pain management centre, after a comprehensive evaluation of patients that includes physical examination, review of a patient's medical history, create a plan that may include a combination of physical therapy, medical and interventional treatments to determine the best solution, and coordinate all aspects of treatment. Interventional pain procedures are aimed at targeting the pain generators and reducing inflammation and breaking the pain cycle. These range from minimally invasive injections such as epidural steroid injections, facet injections, and sacroiliac joint injections, neurolysis,sympathetic blocks to the more advanced therapies like radiofrequency ablation, implantable morphine pump, spinal cord stimulation, interfering with the nerve impulses that make you feel the pain.

The armamentarium of a pain physician today holds a wide range of options.Drugs apart from the usual painkillers that form a group known as coanalgesics include(antineuropathic medications like anticonvulsant-antidepressants),opioids, channel blockers, NMDA receptor blockers, bisphosphonates, alpha receptor agonists,muscle relaxants, work very well in majority of painful conditions .Transcutaneous patches ,Implantable drug delivery systems,patient controlled analgesic devices ,non-operative treatments of pain, PRP injections have revolutionized the treatment of chronic pain- whether somatic or visceral, malignant or nonmalignant origin,especially spinal pain . There is faster recovery, no hospital stay,costeffective,and no chance of failed back surgery syndrome- the most fearsome complication of an open surgery.

Congratulations

Dr. Krishnan Swaminathan, Consultant Diabetologist& Endocrinologist

On articles published on

Metals in urine in relation to prevalence of pre-diabetes, diabetes and atherosclerosis in rural India

In

Occupational and Environmental Medicine

KMCH launches its New center in Kovilpalayam on Sathymanagalam Road

Hon'ble Minister Thiru. S.P.Velumani inaugurating KMCH Kovilpalayam Hospital on 04.02.18, in the presence of Thiru. P.R.G. Arunkumar -MLA, Coimbatore North, Thiru. V.C. Arukutty - MLA, Kavundampalayam, Thiru. O.K. Chinnaraj -MLA, Mettupalayam, Thiru. Amman K. Arjunan - MLA, Coimbatore South, Thiru. A. Shanmugam - MLA, Kinathukadavu, Thiru. R. Kanagaraj - MLA, Sulur, Dr. Nalla G Palaniswami - Chairman, KMCH, Dr. Thavamani D Palaniswami - Vice Chairman, KMCH, Dr. Mohan Sethupathi Gounder - JMD, KMCH, Dr. Arun N Palaniswami - Executive Director,KMCH.

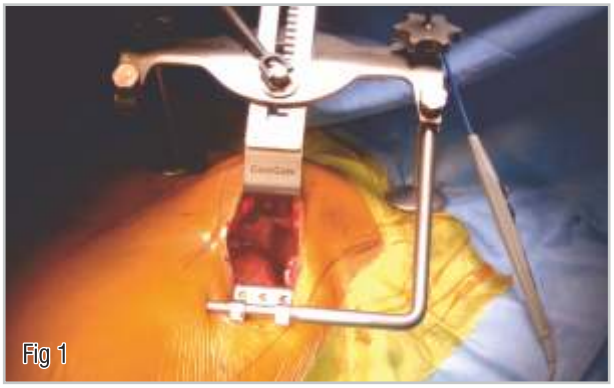
KMCH Group of Hospitals launched a 100 bedded new hospital "KMCH Kovilpalayam Hospital" at S.S Kulam, Kovilpalayam, Sathy road, Coimbatore with specialties like : 24 hrs Emergency and Trauma care | Obstetrics and Gynecology | Pediatrics | Interventional Cardiology | General medicine and General Surgery | Neurology and Neuro Surgery

It has the state of the art facilities like Delivery suite, Neonatal Care, Modern Operation Theater, ICU, X-Ray, Echo, Treadmill (TMT), Ultra sound scan, Lab and Pharmacy with 7 full time consultants Dr. Devakunjari - Gynecologist, Dr. V. Nalini - Gynecologist, Dr. P. Senthilkumar - Pediatrician, Dr. J. Balakumaran - Cardiologist, Dr. S. Karthikeyan - General Surgeon, Dr. L. Jeyasuganthi - General Medicine and Dr. V. Vimal Kumar - Orthopedician.

The Hospital was inaugurated by Thiru. S.P. Velumani, Honorable Minister of Tamil Nadu in presence of MLA'S Thiru. P.R.G. Arunkumar, Thiru. V.C. Arukkutty, Thiru. O.K. Chinnaraj, Thiru. K. Amman K. Arjunan, Thiru. A. Shanmugam and Thiru. R. Kanagaraj. Dr. Nalla G Palaniswami, Chairman - KMCH Welcomed the gathering Dr. Thavamani D Palaniswami, Vice Chairman - KMCH, Dr Mohan Sethupathi Gounder, JMD - KMCH, Dr. Arun N Palaniswami, Executive Director - KMCH Felicitated the guest.

Minimally Invasive CABG (Key Hole CABG)

Dr Devender Singh (Chief Cardiothoracic Surgeon), **Dr G Shegu** (Associate Cardiothoracic Surgeon),
Dr M K Sivakumar (Chief Consultant Anesthesiologist)



Intra OP photo of Internal Mammary Artery Harvest

Post Operative Cosmetic appearance

Minimally invasive surgery is emerging as a new concept in the patient care. The focus is shifting now from conventional treatment to MICS as a safe alternative. Several studies have shown shorter hospital stay, reduced blood loss, reduced ventilation time and reduced postoperative pain in favour of MICS with comparable post operative outcomes. These studies, however did show prolonged cardiopulmonary bypass (CPB) and Aortic cross clamping times in those patients done on CPB.

Pre op Planning: All patients are preoperatively discussed in a dedicated heart team consisting of cardiothoracic surgeons & interventional cardiologist. Contraindications: a) Peripheral arterial disease is a contraindication for femoral arterial cannulation. b)Physical condition & co morbidities are evaluated. (Obesity, uncontrolled DM, COPD CRF)

Surgical Technique: We approach through left anterior thoracotomy in 4th/5th ICS depending on the preoperative planning. Left IMA is harvested using special MICS (MediTech) retractor. LIMA to LAD anastomosis is done using octopus stabilizer. Additional bypass if required to LCX & PDA is done using LIMA - RA Y graft & sequential anastomosis to OM & PDA. All the patients were done as off pump CABG (Beating heart). Results: In our series of 100 cases we had to convert to conventional sternotomy in one case and one patient developed acute renal failure. There was no mortality in our series. With our experience of over 100 cases, we have developed an ideal operative strategy for MICS. We at KMCH are referral center for MICS. This strategy has shown promising results and more patients are demanding these procedures due to obvious advantages.

Congratulations

Dr. G. Shegu, Junior Consultant In Cardio Thoracic Surgery
Dr. P. Devender Singh, Consultant Cardio Thoracic Surgeon
Dr. M.K. Sivakumar, Consultant Cardiac Anaesthetist

On articles published on
Modified carbodis section : A New Technique for Harvesting the Internal Mammary Artery.
&
Ambidextrous Left Internal Mammary Artery Harvest - Gilbert's Technique.

in
Journal: Multimedia manual of cardiothoracic surgery.
Poster presentation: IACTSCON 2018 Vizhakapatnam February 1-4.

Case Report : Pancreatic Drainage Surgery in Chronic Pancreatitis with local complications

Dr. P. Selvarathinam, Dr. Kirubanand, Dr. Ramesh, Dr. Vasanth, Dr. Varun, Dr. Vadivel, Dr. Kavin
(KMCH Sulur Multispeciality Center)

An 45 year old male, a known case of chronic pancreatitis with pseudocyst had recurrent abdominal pain was treated conservatively over the past year. He presented to KMCH Sulur center with intractable pain , nausea and vomiting for 1 week and on evaluation UGI scopy showed esophageal candidiasis & food stasis in stomach with edematous antrum and duodenum There were suggestions of gastric outlet obstruction, biopsy at antropyloric region showed congestive changes.

CECT abdomen showed acute on chronic pancreatits with pseudocyst in head of pancreas 6 x 5 cm size , chronic parenchymal liver disease, mild splenomegaly and minimal ascites.S.Amylase was elevated -763U/L & CA-19 9 -19.30U/ml , CBC ,S.Creatinine ,RBS, lipid profile & LFT were normal except for hypoalbuminemia.

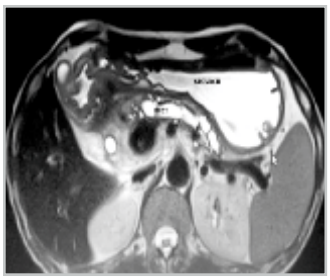
MRCP showed 5x5x4 cm cyst in head and uncinate of pancreas ,irregularly dilated pancreatic duct 8mm communicating with lateral duct.He was an alcoholic with alcohol dependence syndrome and smoker with COPD.

He was optimized with IV fluids ,Ryles tube decompression of stomach, album in infusion, antifungal drugs ,de-addiction therapy, spirometer exercises & chest physiotherapy.

Surgery was planned as the patient has developed local complications of chronic pancreatitis - pseudocyst with dilated pancreatic duct, gastric outlet obstruction & intractable pain. Pancreatic pseudocyst was drained ,Roux en Y anastomosis done with cyst and pancreatic duct with jejunum. Cyst wall biopsy consistent with pancreatic pseudocyst.

Post op -Day -1 vitals was monitered in ICU , started on liquid diet on Day 3 and discharged with drain on Day 5 .Patient was asymptomatic during 15 months follow up period.

MRCP -
Pseudocyst in head of Pancreas



MRCP -
Dilated Pancreatic duct

Cyst & Pancreatic duct opened
& anastomosed with Jejunum

Roux en Y Pancreatico -
Jejunostomy & Jejuno - Jejunostomy

Post OP wound & Drain

Case Report : Eventration of the Diaphragm in Infants

Balasundaram S, Dept. of CTVS, **Ashwath D**, Dept. of Pediatrics, **Shegu G**, Dept. of CTVS,
Sivakumar M.K, Dept. of Cardiac Anesthesia

Eventration of the diaphragm is the permanent elevation of a hemi diaphragm without defects of continuity. Congenital eventration presents with severe cardiorespiratory symptoms in the newborn. In adults and older children the cause is diaphragmatic palsy, and presents with dyspnea and / or sometimes gastrointestinal symptoms. The incidence of this disease is very rare as 1 in 10,000 births.

Case Report: A 2 months old infant weighing 5.6 kg presented with recurrent chest infections since birth. He was the third child of non-consanguineous couple delivered as full term normal delivery. On examination the baby had a respiratory rate of 40 breaths/minute. Hemodynamically stable. Chest examination revealed reduced chest movement in the left infra axillary and inframammary areas with decreased breaths sounds. Tactile vocal fremitus was decreased and impaired note was present Scattered crepts were present in the left lung fields. Blood investigations were within normal limits. Chest X ray anteroposterior view showed raised dome of left hemi diaphragm and mediastinal shift to right side (FIG 1). HRCT scan chest confirmed the findings of eventration of diaphragm .

Under general anesthesia left anterolateral thoracotomy was done through the 6th intercostal space. Very lax left hemi diaphragm was noted. Plication and double breasting of the left dome of hemi diaphragm was done with 2-0 polypropylene sutures(Fig 2). Thoracotomy was closed in layers after placing an intercostal drainage tube (ICD) drain. Post-operative chest X ray revealed left diaphragm in proper position (FIG 3). ICD was removed on the second post operative day. Infant was discharged on the 5th post-operative day. On follow up the baby is healthy .

Discussion: New borns with eventration of diaphragm usually presents with acute respiratory failure. Adults present with dyspnea and chest pain. Atrophy, thinned out wall & progressive distention of diaphragm represents the main characteristics of diaphragmatic eventration. Indications for surgery include respiratory symptoms like tachypnea, dyspnea, recurrent pneumonia and failure to thrive. In those who are asymptomatic surgical repair is justified to optimize future lung growth. The anomaly is based on a defect of penetration of cervical myotomes in the elements which make the diaphragm, the septum transversum, the pleuroperitoneal folds, the common mesentry and the lateral wall of the colon.

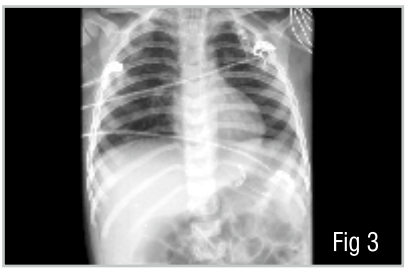
Conclusion: In infants and children with recurrent respiratory tract infections though rare a differential diagnosis of eventration of diaphragm should be kept in mind. Plication of diaphragm is the treatment of choice. Surgery is safe and results in definitive cure for the patient and restores normal pulmonary parenchymal volume by replacing the diaphragm in its normal position.

Acknowledgement: We would like to thank Ms. Rubina our physcian assistant for her help in preparation of the manuscript.

Reference: 1. Paris F et al. Diaphragmatic eventration in infants. Thorax 28.1(1973): 66-72. | 2. A Soni, P Singh, RJ Singh. Eventration of Diaphragm – embryological basis. J Anat.SOC.India,54 (2005)pp39-41.

Chest X ray AP view shows eventration of left diaphragm as a smooth elevation of the left diaphragm and mediastinal shift.

Surgical image of plication and double breasting of the hemi diaphragm.



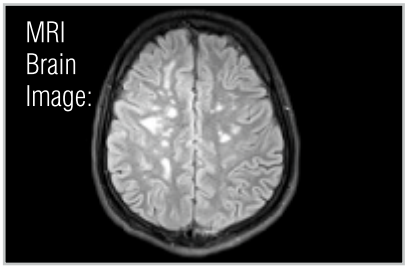
Chest X ray AP view post op shows left diaphragm in proper position

Case Report: Cerebral Fat Embolism Syndrome

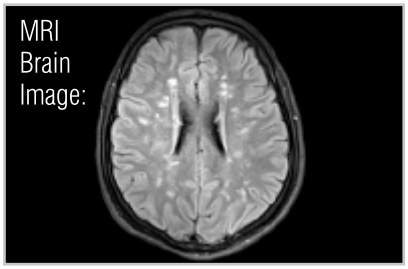
Dr. P. Vivekananthan, Dr. Lakshmikanthcharan, Consultant Intensivist

Abstract: Fat Embolism Syndrome (FES) most commonly occurs after traumatic long bone injuries. Though the incidence reported by various studies range from 1% to 33%, it remains a diagnostic challenge to the clinician. Cerebral fat embolism syndrome (CFES) may manifest from minimal changes in mental status to deep coma. In polytrauma patients without any traumatic neuro parenchymal injury, if there is a clinical suspicion of CFES, they will benefit from MRI of brain to confirm diagnosis and manage appropriately.

Key Words: Fat Embolism Syndrome (FES), Cerebral Fat Embolism Syndrome (CFES), Glasgow Coma Scale (GCS)



Case: Twenty one year old youngster presented to a tertiary orthopediccenter following Road traffic accident. He had both bone fractures of the right leg. He had no history of loss of consciousness and on admission he was alert with Glasgow Coma Scale (GCS) of 15/15. However after 7 hours of presentation he had altered sensorium and his GCS dropped to 4/15(E1V1M2). There was no documented haemodynamic compromise at any time. He was intubated, ventilated for airway protection and respiratory failure. He was referred to our centre for further care. On admission to our centre his Blood Pressure was 120/70, Pulse Rate 130/min, oxygen saturation was 97% with 60 % fio2 and 8 of PEEP. His temperature was 38*C and GCS was E2 V (ET) M4. His Chest X ray showed bilateral lung infiltration. Thomas splint had been applied prior to the transfer, to stabilize both bone compound fractures. He was oliguric and had high coloured urine. Our initial suspicion for his deterioration in his conscious level was trauma related intra cranial injuries. The CT scan of the brain was normal. MRI scan showed multiple scattered punctate T2 flair hyper intensities in cerebral and cerebellar hemisphere highly suggestive of cerebral fat embolism syndrome. His CPK was 1050. Serum creatinine was 1.0. His cardiac status was normal. He was resuscitated with intravenous fluids. Antibiotic IV Amoxicillin+clavulanic acid along with anticonvulsant were given. After initial stabilization, patient had wound debridement as it was an open wound and immediate internal fixation was deferred. Next day he had worsening chest infiltrations on x ray, requiring higher oxygen requirement and higher PEEP. His endo tracheal sputum sample had no organism on gram stain. Platelet count had decreased to 125000 from 250000. Further he had petechial rashes over the trunk and left conjunctiva. On 3rd day he had further drop in platelets to 1 lakh. On 4th day of admission, his CPK level and platelet count started to improve. Later his chest infiltrations started improving along with better oxygenation and it was conducive to wean the ventilator support. His neurological status was 5T/15 (E2 M3 V ET) which had not improved drastically. On 7th day of hospitalization he underwent open reduction and internal fixation of both bones right leg and needed surgical tracheostomy for respiratory weaning. He was weaned from ventilator and shifted to high dependency unit after couple of days. His neurological condition showed mild improvement after second week of hospitalization. On discharge from critical care area his GCS was E4 M2 V (Tracheostomy Tube). Further language, speech therapy and physiotherapy were needed during his ward stay. During follow up in the ward, he had regained his GCS to 15 and was discharged home.



Discussion: FES was reported as a clinical entity in 1862, when fat globules were identified in the pulmonary vessels on autopsy. Incidence reported ranges from 1% to 35% due to traumatic long bone injuries.However, FES is less common in non-traumatic causes. Various factors which will increase the incidence of FES including closed long bone fractures, pelvic injury, rib fractures and multiple bone injuries: 1-3% incidence reported with single femoral fracture and nearly 33% with bilateral femoral fractures. In our case patient had open both bone fracture leg. Clinical presentation usually starts between 12 to 72 hrs of initial insult predominantly

characterised by sudden onset of respiratory insufficiency, altered mental status and petechial rash. The patient had altered mental status within 12 hrs and respiratory insufficiency requiring mechanical ventilation in the initial 24 hrs.

Clinical features of FES constitute cerebral manifestations, respiratory distress and petechial rash. Gurd and Wilson criteria to diagnose FES is presence of at least two of the above three features. Other associated signs include pyrexia, reduction in haematocrit, retinal changes, tachycardia, jaundice and renal changes. Our patient had all three major criteria including hypoxia, neurological involvement, skin petechiae and some of the minor criteria like tachycardia, hyperthermia and low platelets. Most common presentation is sudden onset respiratory insufficiency (96% of the cases) which makes the clinician to suspect fat embolism.(4) Our patients had cerebral manifestations with profound alteration in mental status along with breathing difficulty within 12 hrs of insult.

Main stay of management for FES is supportive therapy (2). Adequate haemodynamic resuscitation and prevention of shock is vital in traumatic patients. Aggressive management to reduce the duration of shock will prevent ensuing multi organ failure. Early fixation of long bone fractures in stabilized patients within 24 hours can prevent the incidence of FES(2). Hence early suspicion, preventive measures, early diagnosis and supportive care will reduce morbidity and mortality. Currently the mortality rate is less than 10%. In most of the patients, complete resolution of neurological and pulmonary complications is expected. Role of corticosteroids, albumin is not well established. Appropriate sedation and reduced use of muscle relaxants in ventilated patients, will aid clinical neurological examination in those with cerebral manifestations. Early clinical suspicion of cerebral fat embolism and MRI imaging is essential (3). In patients where clinical suspicion of CFES is high but who do not have features of major criteria, MRI of brain proves to be vital in confirming the diagnosis. Scattered cytotoxic edema is a common MRI finding than the classical star fieldappearance (5). Our patients were resuscitated with crystalloids, ventilator support, and LMWH. Our patient had good neurological outcome, though the first patient took longer to recover.

Conclusion: Although rare, Fat Embolism Syndrome in traumatic long bone injuries can occur resulting in significant mortality and morbidity. Early clinical suspicion and early MRI imaging is essential in diagnosing cerebral fat embolism syndrome. Our case has highlighted the role of early suspicion and recognition of Cerebral Fat embolism syndrome. Supportive care with adequate hydration, optimal ventilation favors good neurological and clinical outcome. Early stabilization of fractures with surgical intervention can be helpful in preventing FES. Further the case studies have emphasized the need for early MRI imaging in diagnosing cerebral fat embolism syndrome to reduce morbidity and mortality.

Congratulations

Dr. J.K.B.C. Parthiban, Senior Consultant Neurosurgeon

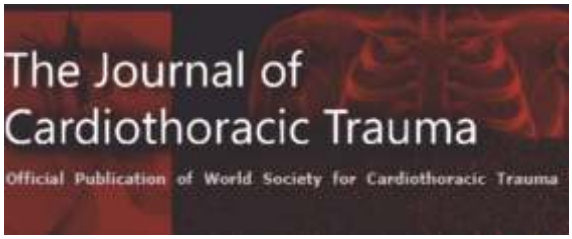
Accomplishments for the year 2017 :

Board Member: Spine Committee WFNS (World Federation of Neurosurgical Societies).

Board Member : Executive Committee NSI (Neurological Society of India).

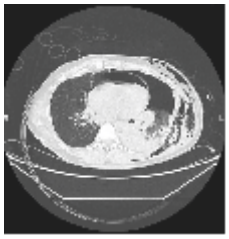
Board Member : Executive Committee APCSS - Asia Pacific Cervical Spine Society.

Paper Published : J Spinal Surg 2017;4 (1):1-3,IJNS Indian Journal of Neurosurgery,
DOI: 10.1055/S- 0037 – 1606825,J Spinal Surg 2017; 4 (4): 141-144, Neurol India 2018;66:126-32



Published Case Report : Traumatic Tension Pneumopericardium : A Rare Complication

P. Vivekananthan, Mudalipalayam N Sivakumar, Mohamed Hisham, S. Lakshmikanthcharan
Department of Critical Care Medicine, Kovai Medical Center and Hospital, Coimbatore, Tamil Nadu, India



A 36- year old male was admitted with shock following a road traffic accident. The patient had a low Glasgow Coma Scale score of 8/15 for which he was intubated and ventilated. Computed tomography scan showed pneumomediastinum and pneumopericardium along with left-sided hemopneumothorax. Hemopneumothorax was addressed with an intercostal drain. There was no further blood loss. Persisting hemodynamic compromise needing inotropic support prompted a diagnosis of tamponading effect of pneumopericardium. Pericardiocentesis was performed which resulted in immediate hemodynamic stability. The patient was discharged from intensive care unit after tracheostomy and had a complete recovery. Tension pneumopericardium is an extremely rare condition which can be fatal if left untreated. Prompt suspicion, diagnosis, and treatment of the condition in a hemodynamically unstable polytrauma patient can be lifesaving.

Workshop on Extracorporeal Life Support (Simulator Based)

Inaugural Lamp Lighting Ceremony

Interactive Hands on Workshop

Workshop participants along with Training Team.

Workshop on Extracorporeal Life Support (Simulator Based) in collaboration with ECMO Asia and Heath Training Asia was successfully conducted on February 22nd& 23rd 2018 at Kovai Medical Center and Hospital for the FIRST time in Coimbatore and in TamilNadu. Extracorporeal Life Support is an Extracorporeal technique of providing prolonged cardiac and respiratory support to patients whose heart and lungs are unable to provide an adequate amount of gas exchange or perfusion to sustain life.

Intensive care consultants along with professionals across surgical and various medical specialities including perfusionists participated in the programme. The interactive course helped them benefit immensely in carrying out ECMO initiation and troubleshooting with hands on experience. The course was unique and welcomed by each and every participant. It is anticipated that the participants would promulgate the practice of ECMO in their healthcare settings with greater knowledge and skills acquired during this workshop. The course was initiated and organized by Dr.M.N.Sivakumar Head - Department of Critical Care Medicine under the aegis of our chairman and Maquet Getinge. Dr.Sandeep Dewan Head – Department of Critical Care, Fortis Gurgaon and Dr.Munish Chauhan Consultant Intensivist from Fortis hospital were the guest faculties.

Welcome to KMCH Family

Dr Balakumaran J. M.B.B.S, M.D (Gen.Medicine), D.M (Cardiology), Consultant Interventional Cardiologist, has completed M.B.B.S (2006) from IRT Perundurai Medical College and did his M.D (General Medicine) from Kasturba Medical College, Manipal (2010). He was awarded best outgoing student of the year and also got a Gold Medal in General Medicine. He Completed D.M (Cardiology) in 2015 from Post - Graduate Institute of Medical Educational and Research, RML Hospital, New Delhi - 1,He was awarded Gold Medal and also got the best Cardiology fellow of the year (2015) from Cardiology Society of India - National Interventional Council. He worked as a Junior Consultant in Cardiology from 2015 to 2018 at Kovai Medical Center and Hospital, Coimbatore. Now he has been promoted as a Consultant Interventional Cardiologist in KMCH Kovilpalayam Hospital.

Dr. K. Dhilipan, Consultant Emergency Medicine, MBBS and M.D. Emergency Medicine from Sri Ramachandra Medical College, Chennai. Worked as an assistant professor in Sri Ramachandra Medical College, Chennai. Joined as a consultant in Emergency Medicine at Kovai Medical Center and Hospital since march 2018.

Dr Dhevakunzari I. M.B.B.S., DGO., Consultant Obstetrics and Gynacologist, has Completed M.B.B.S from Coimbatore Medical College (1991). She worked as a Medical Officer at Rao Hospital, Coimbatore, then joined as Resident Medical Officer at Aravidan Nursing Home, Kovilpalayam. Completed DGO at PSG Institute of Medical Science and Research (PSGIMSR), Coimbatore (2009 - 2011). From 2011 worked as a Consultant Obstetrics and Gynaecologist at Aravindan Nurshing Home, Kovilpalayam. Now Joined as Consultant Obstetrics and Gynaecologist at KMCH Kovilpalayam Hospital, Coimbatore.

Dr Jayasuganthi L. M.B.B.S., working as Senior Medical Officer, persued her Medical Graduation in Russian State Medical University, Moscow, Russia in 2002. Subsequently completed Internship from Safdarjung Hospital, New Delhi. Practised as General Practionar at Thiruvannamalai for 3 years. Joined at Kovai Medical Center and Hospital as Medical officer. Moved to KMCH Kovilpalayam Hospital as a Senior Medical Officer.

Welcome to KMCH Family

Dr Karthikeyan S. M.B.B.S., M.S., F.MAS., D.MAS., F.I.C.R.S., Consultant General & Laparoscopic Surgeon, has Completed M.B.B.S from the Prestigeous Rajah Muthiah Medical College, Annamalai University, Chidambaram in 2008 and Underwent Postgraduation in M.S General Surgery in Vinayaka Missions Medical College, Karaikal (2010 - 2013). He further did his training at Apollo Hospitals Chennai in the Department of Surgical Gastroentrology. He was awarded F.MAS (Fellowship in Minimal Accesses Surgery) and D.MAS (Diploma in Minimal Accesses Surgery) respectively after training in Delhi and IRCAD, France (2014-2015). He was trained in Robotic Surgery in Delhi and was awarded FICRS (Fellowship of International College of Robotic Surgeons). He Joined KMCH in 2016 as Registrar in Department of Surgical Gastroentrology and worked till 2018. He was promoted as Consultant General & Laparoscopic Surgeon at KMCH Kovilpalayam Hospital.

Dr Nalini V. M.B.B.S., DGO., DNB (OBG)., FRM., Consultant Obstetrics and Gynaecology & Fertility, has Completed M.B.B.S from Stanley Medical College, Chennai (1998 - 2004), DGO from Madurai Medical College (2006 - 2008) was awarded Best outgoing student. Completed DNB (Obstetrics and Gynaecology) at GKNM Hospital, Coimbatore (2009 - 2011) Fellowship in Reproductive Medicine at CIMAR Hospitals, Kerala (2013 - 2014). Worked as Consultant Obstetrics and Gynaecology at Aravindan Nursing Home, Kovilpalayam (2011 - 2017), Now she is working as OBGYN and Fertility Consultant at KMCH Kovilpalayam Hospital.

Dr. P. Shankar M.B.B.S, M.S (ENT), Asst Professor in ENT, has completed his undergraduate Medical Training from Tamilnadu Dr.MGR Medical University during 2006 - 2012 and completed his Post Graduation in Otorhinolaryngology from Annamalai University during 2013 - 2016. Joined MAHER University as Senior Resident in 2016 and promoted as Asst Professor in 2017. Joined KMCH City Center Coimbatore as Consultant ENT Surgeon.

Dr Senthil Vidhyasagar J. M.B.B.S., M.D (Anaesthesiology)., Consultant Anaesthesiologist, has Completed M.B.B.S (2000) from JSS Medical College, Mysore and did his M.D Anaesthesiology from Annamalai University (2005). Experience: CMC Vellore as Tutor - Intensive Care Unit from 2005 - 2007. Ramachandra Medical College as Asst. Professor Cardiac Thoracic Anaesthesia from 2005 - 2008. Consultant Anaesthetist at KMCH Speciality Hospital, Erode from 2008 - 2010. Consultant Anaesthetist at Kalyani Kidney Care, Erode. Premier Anaesthesia Care at Bangalore from 2014 - 2016. Senior Consultant Anaesthesiologist at Shri Ramakrishna Hospital, Coimbatore. Now working as Consultant Anaesthesiologist at KMCH Kovilpalayam Hospital.

Welcome to KMCH Family

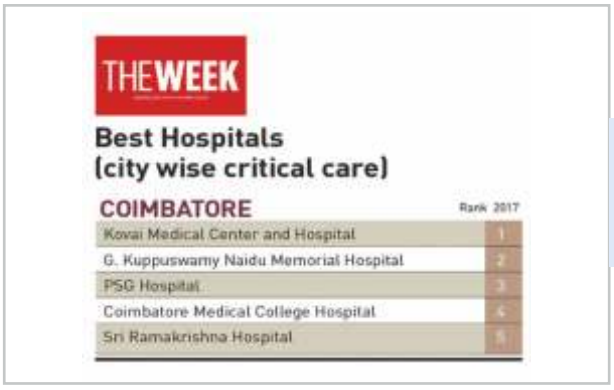
Dr Swati Bhat completed MBBS (2000-06) from Jammu University (J&K), MD Anesthesia (2008-11) from Sri Ramachandra Medical College, Chennai and Fellowship in Interventional Pain Management (2011-12), Daradia The Pain Clinic, Kolkatta. Observership in Pain management Dublin, Ireland. (2012-14) Served as specialist Anesthetist / pain management in Royal Hospital, tertiary care for cardiac and oncology, ministry of Health, Oman). Assistant Professor anesthesiology Chettinad Health City (2015-2017). Joined KMCH in Nov 2017 as Consultant Interventional pain management.

Dr. Vikraman G MBBS, MD, DM (Nephrology, AIIMS), Consultant Nephrologist and Renal Transplant Physician, completed his MBBS from Coimbatore Medical College hospital under Tamilnadu Dr MGR Medical University (1997 to 2003). Worked as an emergency medical officer in hospitals at Tiruppur and Coimbatore. He did his post graduation in Internal medicine from Stanley medical college hospital under Tamilnadu Dr MGR medical university (2007 to 2010). Worked as an Assistant Professor in Chennai medical college hospital and Research center (2010 to 2013) and was a visiting Consultant Physician in various hospitals in Trichy. Later joined DM nephrology in the prestigious institute of AIIMS, Delhi securing first rank in 2013 and underwent training as Senior Resident in various facets of nephrology including Renal Transplantation and interventions. Immediately after completion of DM in 2016, he continued as an Assistant Professor in AIIMS before joining KMCH as Consultant Nephrologist and Renal Transplant Physician in 2017.

Dr. S. Vinoth Kumar MBBS., MRCPCH (UK)., DCH (Ireland)., PG Award (Diabetes), completed MBBS (2004) under the Tamilnadu Dr. M.G.R. Medical University, Chennai. DCH (2015) Royal College of Physicians & Surgeons in Ireland, Dublin.MRCPCH (2015), Royal College of Paediatrics and Child Health, London, U.K. Post Graduate Award (2017) in diabetes, The university of Warwick, U.K . Worked in various prestigious hospitals in U.K and gained 11 years of experience in Paediatrics. Sub Specialty: 6 Months training in Paediatric Respiratory Medicine and a year in clinical fellowship training in Paediatric Cardiology. 2 years' experience in Community Paediatrics (Autism, ADHD, Behavioral Problems etc.)and other pediatricsubspecialties like Neurology, Oncology and Nephrology. Joined KMCH City Center Coimbatore in Feb 2018 as Consultant Paediatrician.

Dr. S. Thangadurai completed his MBBS from Thanjavur Medical College,Thanjavur in 2010.Completed his MD Anaesthesiology from Thanjavur Medical College in 2015. Worked as senior resident in Anaesthesiology, Chennai Medical College Hospital and Research Centre, Trichy. Worked at Meenakshi Hospital, Thanjavur as consultant anaesthesiologist & intensivist for one year. He worked as consultant anaesthesiologist in Sudar Hospital and Research Institute, Thanjavur for 1 year. Joined as consultant anaesthesiologist at KMCH speciality Hospital Erode since JAN 2018. Special area of interest : Obstetric and neuro anaesthesia, anaesthesia for laparoscopic surgeries

Other Events at KMCH



The Week awards KMCH with best ICU

Inaugurating the "LIFE, ONCE MORE!
A Support group for liver disease patients"

Inaugurating the "Kovai Marathon 2017".

2018 AHPI Award for "Patient Friendly Hospital"

Accident Free New Year

Oncology Conference

Stroke! 3 Treated within Hours
Chances of Recovery is High

If you find any of these symptoms,

Face drooping on side

Numbness in limbs

Slurred speech

Call for Emergency Help

95665 95665

MOBILE STROKE UNIT

ONBOARD CT SCAN AND MEDICINE FOR ON ROAD TREATMENT

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