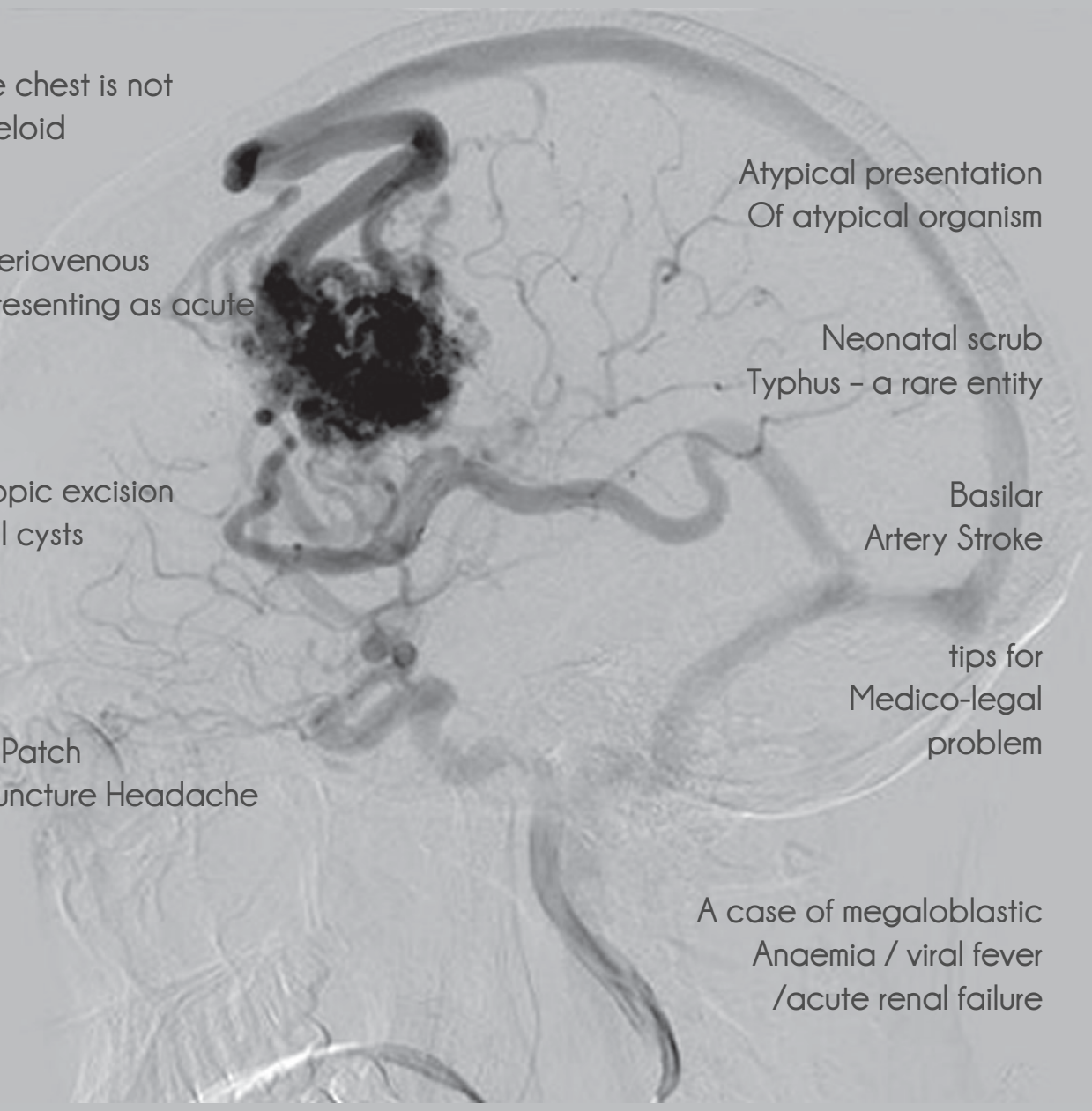
VOLUME - 23 | ISSUE - 02 | APRIL 2018

kauvery CAPSULE

Medi Magazine
A quarterly magazine
from
kauvery hospital



All that is on the chest is not
Necessarily a keloid

Basi- frontal Arteriovenous
Malformation presenting as acute
subdural bleed

Total laparoscopic excision
Of choledochal cysts

Epidural Blood Patch
for Post Dural Puncture Headache

Atypical presentation
Of atypical organism

Neonatal scrub
Typhus – a rare entity

Basilar
Artery Stroke

tips for
Medico-legal
problem

A case of megaloblastic
Anaemia / viral fever
/acute renal failure

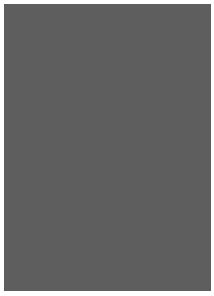
To download
this magazine
scan this QR Code
with QR scanner APP
in your smartphone

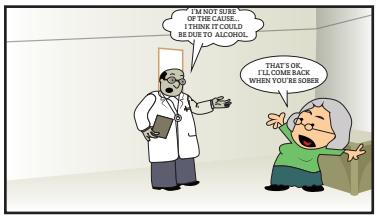
CAPSULE MAGAZINE

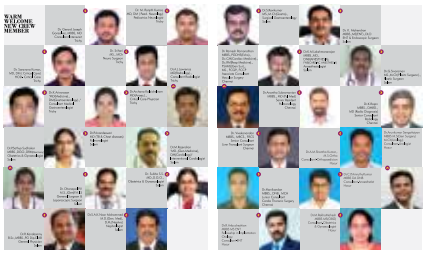
Capsule Magazine is published by Kauvery Hospital

EDITORIAL OFFICE
Kauvery Hospital
VI Floor, Administrative Office,
#6, Royal Road, Cantonment,
Tiruchirappalli-620001
Call us at (431) 40 77 777
E: capsule@kauveryhospital.com
W: www. kauveryhospital.com

IN THIS ISSUE







Dear colleagues and friends,

It gives me great pleasure to take over from Dr. S. Senthil Kumar as Editor of Kauvery's Capsule magazine henceforth. Over the years, Capsule has become a visual treat, with good content and has a very wide reach and acceptance among our referral base. I look forward to all your support to taking Capsule to even greater heights and someday, I wish it would be as popular as a "Coffee table book", with content that would interest even the common man. We are proud to have departments that are on par with the best in the country, and this magazine helps to showcase our wonderful work to all of you. Most of us would be surprised that what is described in textbooks is being done on a day to day basis in Kauvery, and Capsule would help to serve as the "all seeing eye" giving a sneak peek into the wonderful world of medicine.

The magazine is undergoing a slight makeover, shifting from purely medical case based content, to a mix of medical content, interesting cases and information that would make for interesting reading, with a little bit of something for everyone.

We are also working on a revamped online edition with interactive content, and containing videos of post op follow up, functional recovery, or rare procedures that will make for interesting viewing overall.

We wish to also move to user driven content, and we would appreciate your valuable feedback and suggestions to make Capsule even better in the years ahead.

Please do send your suggestions and comments to trichyplasticsurgery@gmail.com. We will publish the best "Letters to the Editor" in the subsequent issues, and work towards implementing your suggestions for a better Capsule.

Capsule is what it is thanks to all your support. Looking forward to more active participation from our readers and your continuing patronage.....

Dr. Skanda Shyamsundar
HOD, Dept. of Plastic & Micro Surgery
Kauvery Hospital, Trichy

ATYPICAL PRESENTATION OF ATYPICAL ORGANISM

Pediatric Team
Dr Senguttuvan .D , Dr Suresh Chelliah , Dr K. Senthil Kumar,
Dr C.Vignesh, Dr K. Swaminathan , Dr Naresh Kumar N.
Dr. Pradeep, Dr. Rubini
Kauvery Hospital, Trichy

A six year old girl, presented to our emergency department on day six of illness, with high grade intermittent fever for six days associated with periumblical abdominal pain, non-bilious vomiting and loose stools for a day. There was history of mild cough since day three of illness. No other associated systemic symptoms were present

CLINICAL FINDINGS AND INVESTIGATIONS

This child was febrile and tachypneic at presentation, with signs of compensated shock. Her abdominal examination revealed mild hepatomegaly. Other systems were normal. Her Q-SOFA score was three, indicating severe illness.

Peripheral smear revealed mild normocytic normochromic anemia, leucopenia, thrombocytopenia with other cell lines in normal limits.

Liver function tests revealed very high liver enzymes with normal bilirubin level, mild hypoalbuminemia and bleeding parameters were deranged. Renal function tests were normal. CRP was very high suggestive of severe sepsis.

Chest xray revealed peri-hilar infiltrates more on right side suggestive of pneumonia.

THE WORKING DIAGNOSIS AND MANAGEMENT

Infectious causes like severe sepsis / enteric fever / scrub typhus with features of compensated shock were considered clinically. She was resuscitated with intravenous crystalloids, oxygen and inotropes. She was given intravenous antibiotics after obtaining blood for aerobic culture.

In view of Pneumonia with hepatitis, anemia, leucopenia, thrombocytopenia and coagulopathy, other differentials like Sepsis with DIC / Swine flu (H1N1) / Leptospirosis/ SLE with autoimmune hepatitis were considered. She was supported with adequate antibiotics, antiviral, blood products and adequate hepato-supportive measures. Etiological workup was negative for Dengue , leptospirosis, scrub typhus and Swine flu. Autoimmune workup was also negative.

Secondary Hemophagocytosis was considered in view of persistent bicytopenia, fever & hepatitis, however complete workup ruled out that diagnosis.

SUBSEQUENT CLINICAL PROGRESS

Her liver enzymes that were grossly elevated gradually reduced from day 4 of hospitalisation after adequate hepato-supportive measures. Her coagulopathy was corrected gradually. Anemia was corrected with packed cell transfusion. However in view of persistent thrombocytopenia, persistent

fever, oxygen dependency and poor clinical response to higher antibiotics, atypical organisms were considered. Anti-Mycoplasma IgM was strongly positive. She was then started on intravenous azithromycin.
This child's recovery was dramatic and she was gradually weaned off from oxygen. Her blood counts, liver function and bleeding parameters returned to normal shortly. She was discharged on day nine of hospitalisation. She was doing well on her follow up.

DISCUSSION:
Mycoplasma, the smallest free-living microorganisms are ubiquitous in nature. Of this group, seventeen have been identified as human pathogens. Mycoplasma pneumoniae, Mycoplasma hominis, and Ureaplasma urealyticum found to cause disease frequently in children. It grows under both anaerobic and aerobic conditions, but growth is more consistent when it is incubated in nitrogen and 5 percent carbon dioxide. When compared with other mycoplasmas isolated from humans, M. pneumoniae grows relatively slowly, with visible formation of colonies rarely occurring in less than 1 week and possibly taking 3 weeks or more.

M. pneumoniae commonly affects the respiratory system . However numerous extra-pulmonary manifestations have been documented. Pulmonary and extrapulmonary manifestations are tabulated below (table-1). Gastrointestinal manifestations including hepatitis, acute acalculous cholecystitis, and pancreatitis have been reported. Elevated liver enzymes are rarely observed during M. pneumoniae infection in children. Liver involvement was transitory in these patients, and recovery of liver enzymes to normal range correlated directly with resolution of mycoplasma pneumonia, as demonstrated in our patient.

PULMONARY	CARDO VASCULAR	BLOOD	GASTRO-INTESINAL	CNS	MUSCULO- SKELETAL
-Pharyngitis -Otitis media -Croup -Bronchitis -Infectious asthma -Pneumonia	-Pericarditis -Perimyocarditis -Secondary heart block	-Hemolytic anemia -Thrombocyto-penia -Disseminated -Intravascular coagulation -Secondary hemophagocytosis	-Hepatitis -Cholecystitis -Pancreatitis -Splenic infarct	-Aseptic meningitis -Rye-like illness -Cerebral Infarct -Psychosis -Radiculopathy -ADEM	-Arthritis -Polymyositis -Rhabdomyoly-sis -Leucocytoclastic vasculitis

Mycoplasma can be detected easily by cold agglutinin method, detection of IgM / IgA antibodies by ELISA method and polymerase chain reaction method.

TREATMENT
Azithromycin and clarithromycin both are approved for the treatment of community-acquired pneumonia and severe disease in children. In more serious illness such as Stevens-Johnson syndrome and neurologic disease, case studies have indicated little evidence of therapeutic benefit with either erythromycin or tetracycline therapy. Corticosteroids have been used in severe conditions like steven Johnson, neurological manifestation, severe pneumonia and hemoytic anemia.

CONCLUSION:
We report a case of Severe mycoplasma pneumonaie infection with atypical manifestations namely severe pneumonia associated with hepatitis, thrombocytopenia and coagulopathy, who recovered well with adequate intravenous azithromycin therapy. Mycoplasma infection should be considered as a differential diagnosis when atypical extrapulmonary clinical manifestations are encountered.

REFERENCES
1. Waites KB. New concepts of Mycoplasma pneumoniae infections in children. Pediatr Pulmonol.2003;36:267–278.

2. Kim JH, Chae SA, Lee DK. Clinical findings of Mycoplasma pneumonia in children, from 1998 to 2003.Korean J Pediatr. 2005;48:969–975

3. Feigin and cherry textbook of Pediatric infectious disease

ALL THAT IS ON THE CHEST IS NOT NECESSARILY A KELOID

Dr. Skanda Shyamsundar
HOD, Dept. of Plastic & Micro Surgery
Kauvery Hospital, Trichy

Keloids are one of the most common swellings seen on the chest wall in surgical practice. However, a high degree of suspicion is needed in unusual swellings on the chest wall, and an error in diagnosis could have dire consequences. Presenting one such case.

CASE HISTORY

A 34 year old male had presented with the history of a rapidly growing swelling on the chest wall for three months. He had previously visited another surgical clinic where the diagnosis of a keloid was made and treated with intralesional kenacort. Even after completion of 4 doses of kenacort, no response was seen and the swelling paradoxically increased in size. Following this, the patient visited us for a second opinion

OUR APPROACH AND THE REASONING

On examination, there was a firm to hard swelling 3x3 cm with irregular margins on the chest wall with bosselated surface. Also the history of rapid growth in the swelling suggested a more sinister diagnosis. We suspected a soft tissue sarcoma, most probably DERMATOFIBROSARCOMA PROTUBERANS and hence proceeded with a biopsy.

AN UNPLEASANT SURPRISE IN THE BIOPSY

Biopsy in this case threw up an unpleasant surprise. This swelling turned out to be a HIGH GRADE CUTANEOUS LEIOMYOSARCOMA, a highly aggressive malignant lesion. Luckily for the patient, there were no metastatic lesions or involved lymph nodes at the time of diagnosis. MRI revealed that the lesion was situated only at the cutaneous level and there was no invasion of deeper structures.

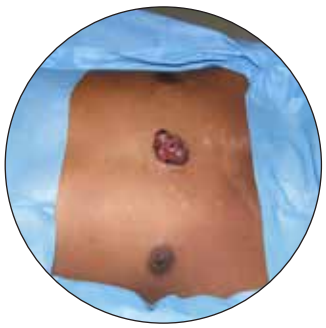
THE TREATMENT PLAN

The patient was taken up for surgical treatment and wide local excision with 2 cm margins was done. There was a large defect in the centre of the chest exposing the sternum. This defect was covered with a pectoralis major myocutaneous flap. The post op period was uneventful and patient was sent for radiotherapy. Margins were negative in biopsy. The patient has remained recurrence free in a 2 year follow up period.

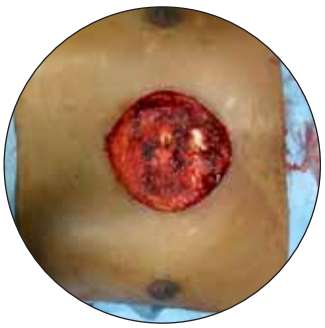
LESSONS TO BE LEARNT

A very valuable lesson to be learnt is that more often than not, in our practice, The patient is always right. This patient had repeatedly mentioned to the previous treating doctor that the swelling was increasing, but he was sent away. When in doubt, TISSUE DIAGNOSIS IS THE ONLY TRUE CONFIRMATION. A confirmatory diagnosis of a highly aggressive malignant lesion is life altering for the patient and needs the appropriate multimodality approach. In this case, the patient was lucky and the diagnosis was spotted relatively early and we could go for a curative approach. As practitioners, we must be alert and aware of such problems and must be thorough in our clinical examination.

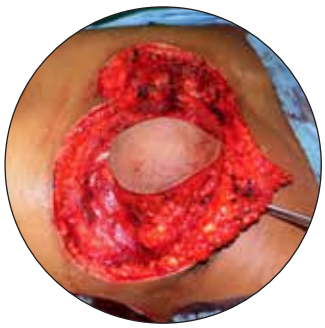
An elegant reconstruction is also important in such cases, where the post op radiation plan is taken into mind, and attention must be paid to cosmesis and functional outcome in such patients. Here there is no unevenness at first glance in the position of the chest, with little evidence of the patient having undergone such a major reconstruction.



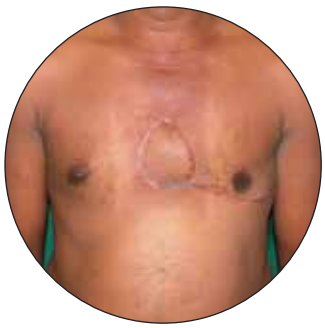
The tumar on the chest wall



The defect after excision of tumor



Coverage with pectoralis major flap



One year follow up showing no recurrence and a near perfect nipple level on the operated side

BASI- FRONTAL ARTERIOVENOUS MALFORMATION PRESENTING AS ACUTE SUBDURAL BLEED

Dr. Jos Jasper
Head of the Department
Kauvery Brain and Spine centre

Cerebral Arterio Venous Malformations [AVM] are vascular abnormalities consisting of fistulous connections of arteries and veins without normal intervening capillary beds. Though perceived to be congenital, it rarely presents in the younger age group. Parenchymal / pial AVMs usually present with intraparenchymal bleed (ICH). This write up is about a young girl who had a rare presentation of acute sub dural haemorrhage (SDH) due to an underlying AVM.

CASE HISTORY

This eight-year-old girl who was completely normal the previous night presented with sudden onset of vomiting and seizures, waking the family up early in the morning. As her level of consciousness slowly dropped, she was brought to the ER by her parents. The presenting GCS was E1V1M2 with pupillary asymmetry. Patient was stabilised and intubated.

INVESTIGATIVE FINDINGS

Brain imaging revealed a large left fronto- temporo- parietal SDH with significant midline shift and mass effect. Coagulation profile was normal.

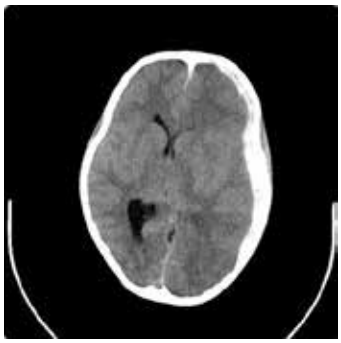
THE TREATMENT PLAN AND PROGRESS OF THE PATIENT

With no history suggestive of coagulation disorders, the reason for such a spontaneous SDH could not be decoded immediately. Emergency decompressive craniotomy was performed as a life saving measure, with watchful co-management and intensive care support from the pediatric department. Cerebral angiogram was done later which revealed a left basi- frontal Arterio – venous malformation with a feeder from middle cerebral artery and draining in to superficial sylvian vein [Fig 2]. Microvascular surgical excision of the AVM was done and confirmed by histopathology. Post-operative angiogram showed complete excision of the vascular lesion [Fig 3]. After a month, patient's tracheostomy was closed. With some involuntary movements and dysphasia, she is on the road to recovery now.

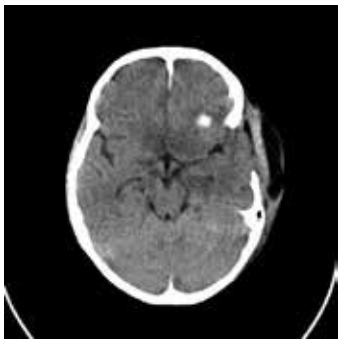
DISCUSSION

AVMs of the brain have an incidence of 1- 4% as estimated by large autopsy series. Patients are typically seen between 20 and 40 years of age.With the increasing use of MRI, the number of asymptomatic, incidentally discovered AVMs has increased. If symptomatic, the most common presentation is that of haemorrhage [30 –70%]. This bleed is rarely subdural unless it is a dural AVM. Pial or classic cerebral AVM bleeds in to parenchyma followed by intra ventricular space and presents rarely as a subarachnoid haemorrhage. Small size, exclusive deep venous drainage, deep location, posterior fossa location, association with aneurysm and venous ectasia are radiological risk factors for presentation with haemorrhage. Other symptoms include seizures, headache and focal deficits due to micro bleeds, mass effect and 'steal' of blood flow. Overall risk for bleed is 2-4 % per year. Once symptoms start, risk of haemorrhage is highest in the first 5 years. In patients with prior history of haemorrhage, the risk for recurrent haemorrhage is up to 44%.Furthermore, in these patients, the risk for subsequent haemorrhage is highest in the first year, and in the first month. The mortality associated with symptomatic haemorrhage can be as high as 30%. Treatment of AVMs include microvascular surgery, radiosurgery and endovascular interventions. Identification of the draining vein/s is the most crucial step of the surgery.

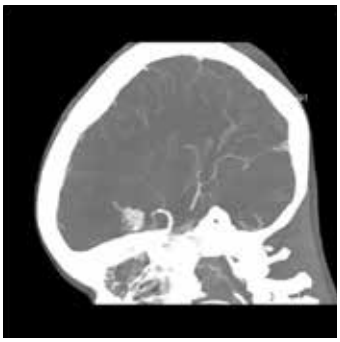
Prognostication of AVMs in literature is mainly using ICH and presentation as SDH is rarely reported. The data of such bleed and AVM is also of a predominantly adult population. Spontaneous SDH in a young patient raised the suspicion but a cerebral AVM was a last suspect. Active management from the paediatric side played a major part in recovery. The mass effect of the SDH over the brain and its secondary neuronal insult may take some more time to recover, but another bleed could have been fatal and would have made our efforts useless. Proper history taking and a high degree of curiosity helped in clinching the diagnosis.

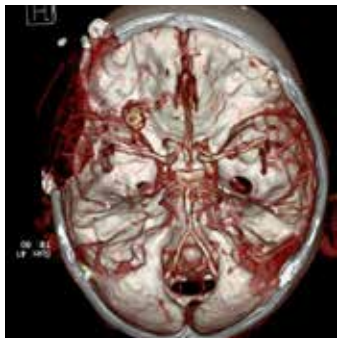


Showing spontaneous subdural hematoma



Post operative well defined hyperdense SOL vascular lesion





CT cerebral angiogram showing well defined AVM in the left basifrontal region.

Come let's travel

The 4th largest town in Tamil Nadu, Tiruchirappalli is an ancient town with a recorded history that dates back to the 3rd century BC. The city has been ruled by various ancient and historical kingdoms and empires. The Cholas, the Pandya, the Pallava, the Vijaynagar Kingdom, the Carnatic Kingdom and the British have ruled this region and have deeply influenced the city's culture over the years. As a result of the various cultural influences Tiruchirappalli is famous for its various monuments and temples. Also, due to the city being surrounded by various channels of the Kaveri River is rich in vegetation and natural resources. Here's the list of the best places you must visit in Tiruchirappalli.

ROCKFORT CITY

A BEAUTIFUL CITY

Rockfort Temple:
Rockfort Temple refers to an ancient fort and the temple which is situated in the fort's highest reaches. Rockfort played a major part in the Carnatic wars that was a major battle that helped establish the British Rule in India. The fort also has the famous Ucchi Pillayar Temple which was built in the 7th century and stands 83 meters high atop a rock in the fort complex. The cave temples built by the Pallavas in 508 AD are the oldest structure in the fort and is also a must be seen attraction.

Sri Ranganathaswamy Temple
Often listed among the largest functioning Hindu temples in the world, the Sri Ranganathaswamy temple was built between the 6th and the 9th centuries by the Azhwar Saints. The temple is dedicated to Lord Vishnu and is the 1st of the 108 Divya Desams or Vishnu Temples in the world. The temple complex is spread across 156 acres and is built in the Dravidian style of architecture. The temple gopuram is 72 meters in height and consists of 72 tiers. The temple is a must visit and is one of the major Hindu temples in the country.

Kallanai Dam
Kallanai Dam is one of the major attractions in Tamil Nadu which was built nearly 2000 years ago. The Kallanai Dam was built by the Cholas in the 2nd century AD and is one of the oldest functioning water diversion structures in the world which are still in use. The place is located in peaceful and lush green vicinity and is a great picnic spot.

Puliancholai Falls
The Puliyancholai Falls are one of the most amazing picnic spot you can visit in the ancient town of Tiruchirappalli. The falls are a terrace waterfall located in a very serene and calm environment. The calm scenery which can be encountered during your commute is an amazing

experience and will refresh your senses for sure.

The ancient city of Tiruchirappalli is one of the best tourist towns in Tamil Nadu. Owing to its vast history and the culture that the town acquired from the various dynasties and empires that ruled the area, Tiruchirappalli is a must visit.

Our Lady of Lourdes Church

The church is decked out in Gallo-Catholic design, from neo-Gothic spires to anguieshed scenes of crucifixion and matrydom painted inside. In a note of cross-religious pollination, icons of Virgin Mary are garlanded in flower necklaces. Constructed in the year 1840 AD. The church is situated near the rock fort. The main tower is 220 feet in height, and the small tower is 120 feet in height. The statues of St. Sacred heart, along with St. Ignatius, St. Francis Xavier, St.britto is placed at the center of the tower. The church bell is set at a height of 90 feet.

NEONATAL SCRUB TYPHUS – A RARE ENTITY

Pediatric Team
Dr Senguttuvan .D , Dr Suresh Chelliah , Dr K. Senthil Kumar,
Dr C.Vignesh, Dr K. Swaminathan , Dr Naresh Kumar N.
Dr. Pradeep, Dr. Rubini
Kauvery Hospital, Trichy

Scrub typhus, through a rare entity, needs to be considered on an important differential diagnosis in a cute febile illness of newborn pregnanting the such experience in our insititute.

A 14 days old term male neonate, in whom Hirschsprung's disease was suspected, presented with history of vomiting, fever and abdominal distension for two days. He was delivered by normal vaginal delivery. There was with significant antenatal history or history of maternal fever in peri-partal period. Examination showed the following findings:

- Active baby
- No external anomalies
- Soft and distended abdomen with liver palpable two cm below right costal margin
- Bowel sounds heard
- Other systems were normal.

Investigations done revealed the following:

- Thrombocytopenia with other cell lines in normal limits
- High CRP.
- Blood culture - sterile.

A preliminary diagnosis of late onset sepsis made. This baby was treated with intravenous antibiotics and feeds were gradually increased, which were tolerated well.
However, there were persistent fever spikes and on examination, there was an increasing hepato and splenomegaly with further fall in platelet counts. Antibiotics were therefore escalated after repeat cultures. Dengue and scrub typhus were considered as alternative diagnoses and serology for dengue antigen was sent and management changed accordingly.
Fever subsided and platelet counts were increasing, with clinical improvement of neonate. Dengue NS1 Antigen was negative. Scrub typhus IgM done on day 11 of illness was positive, confirming the diagnosis of scrub typhus. Mode of infection for this neonate might be from a mite, in the mattress purchased from street vendors and their residence in an rural area corroborating it. The timely diagnosis and institution of appropriate antibiotics saved the infant from life threatening situation.

DISCUSSION

Scrub typhus is a vector born disease and has high morbidity and mortality if untreated. Transmission via bite of the larval stage (chigger) of trombiculid mite serves as both vector and reservoir. Transmission is most commonly trans-ovarial and regurgitation of infected saliva during feeding. It is extremely rare in newborn period. Neonatal scrub typhus has been reported rarely in literature. Incubation period of the disease ranges between 1-30 days. There are 3 possible route of infection in neonate
1. Transplacental infection,
2. Perinatal blood-born transmission and
3. Postnatal infection.

Vasculitis is the basic mechanism responsible for skin rash, micro vascular leakage, edema and tissue hypo perfusion and end-organ ischemic injury. There is formation of thrombi leading to tissue infarction and hemorrhagic necrosis.

Most newborn present with respiratory distress, fever, decreased oral intake, abdominal distension, hepatosplenomegaly, seizure and lethargy mimicking neonatal septicemia as seen in our case and also in cases reported. An eschar found on clinical examination is a hallmark for the diagnosis. However atypical presentations without eschar as in our neonate, has also been documented. An eschar is present at the site of chigger bite in 7-68% of cases. It affects almost all system. Neonates may develop complications such as shock, seizures, encephalopathy, pleural effusion, pneumonitis and respiratory failure.

On hemogram, total leukocyte and platelet count mostly normal although thrombocytopenia in one quarter to one third patients. Thrombocytopenia was noted in our case and cases reported. Diagnosis mostly based on history, clinical features and serological marker. Antibody mediated test like indirect hemagglutination, ELISA, weil felix, immunoassay help in diagnosing scrub typhus. Doxycycline is the drug of choice. Long course of tetracycline to newborn and young children leads teeth related problems. Use of quinolones during neonatal period may cause problems related to cartilage and bone. Azithromycin is a safer alternative. Clinical trials show that Azithromycin is equally effective.

CONCLUSION

It is increasingly evident that scrub typhus needs to be considered in the differential diagnosis of acute febrile illnesses/ sepsis in the newborn period. Early diagnosis is possible only if there is a high index of suspicion for scrub typhus. Undue delay in administering appropriate antibiotics may lead to increased morbidity and mortality.

TOTAL LAPAROSCOPIC EXCISION OF CHOLEDOCHAL CYSTS

Dr.S. VELMURUGAN MS, FRCS(Glas), FRCS(UGI-HPB), CSST(UK)
HOD & Senior Consultant-Advanced Laparoscopic/GI/Obesity/HPB/Liver Transplant Surgeon
Dr. Archana.R DNB(GS) Trainee
Kauvery Hospitals, Trichy

Choledochal cysts (CCs) are cystic dilations of extrahepatic duct, intrahepatic duct, or both that may result in significant morbidity and mortality, unless identified early and managed appropriately. Complications of choledochal cyst include cholangitis, pancreatitis and malignancy. Complete surgical excision with biliary reconstruction is considered as the treatment of choice. Modified Todani classification is the most common classification used for choledochal cysts. We herewith report two cases of choledochal cysts managed by total laparoscopic excision with reconstruction.

CASE REPORT-1

A 22yr old female, known Rheumatic heart disease patient, presented with complaints of epigastric and right upper quadrant (RUQ) abdominal pain. Patient presented with nausea, vomiting. Examination of the abdomen revealed slight tenderness in the epigastric and right hypochondrial region. No mass was palpable. Serum Amylase and Liver enzymes were elevated. Ultrasound abdomen showed grossly dilated common bile duct (CBD). MRCP showed Todani Type I choledochal cyst with multiple secondary calculi in the CBD, acute edematous pancreatitis with peripancreatic inflammatory changes. Pancreatitis was treated conservatively. Patient was discharged in stable condition. 2 months later she was readmitted for surgery. Total laparoscopic excision of choledochal cyst+Roux-en-Y hepaticojejunostomy +cholecystectomy was done. Postoperative period was uneventful and the patient was discharged on post op day 6. Histology confirmed the diagnosis of choledochal cyst with no evidence of malignancy.

CASE REPORT-2

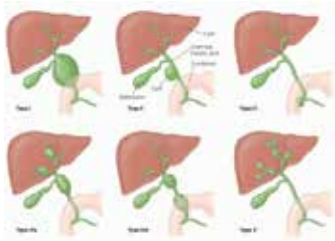
A 50yr old female, known diabetic and hypertensive, presented in another hospital with history of obstructive jaundice and associated RUQ abdominal pain. There was no history of fever. She had already undergone ERCP & Stenting in the outside hospital for suspected CBD stricture.
MRCP showed Type I choledochal cyst, with no CBD stone or stricture. Patient was referred to our centre for further management. Clinical examination and LFTs were normal. Total laparoscopic excision of choledochal cyst +Roux-en-Y hepaticojejunostomy +cholecystectomy was done. Postoperative period was uneventful and got discharged on POD 5. Histology confirmed the diagnosis of choledochal cyst with no evidence of malignancy.

5 ports- One 10mm, one 10-12mm, three 5mm ports. Calot's triangle dissected. Cystic artery and cystic duct clipped and cut individually. Choledochal cyst dissected protecting portal vein and hepatic artery. Choledochotomy performed. All stones and sludge in distal end removed. Check choledochoscopy done to make sure no stones left in distal end. Distal end to cyst dissected as much as possible without injuring pancreatic duct. Distal end of cyst suture ligated and cut. Entire choledochal cyst excised leaving small cuff distal to hepatic ducts confluence. Jejunum divided 20cm distal to DJ with Echelon stapler. Jejuno jejunostomy at 50cm distal to hepatico-jejunostomy site with Echelon stapler (side to side). Stapler entry hole closed with 3-0 vicryl in 2 layers. Retrocolic jejunum taken to porta hepatis. Laparoscopic hepaticojejunostomy done with 5-0 PDS, posterior layer continuous, anterior layer interrupted sutures. Mesocolic and mesenteric windows closed. Cholecystectomy done.

CONCLUSION

Choledochal cyst in adults usually present with complications of longstanding cysts. Diagnosis is made with the help of ultrasound, CT or MRCP. Total cyst excision minimises the incidence of malignancy and prevent complications like cholangitis and pancreatitis. This complex surgery is done totally laparoscopically in our centre and patients had excellent recovery with no morbidity.

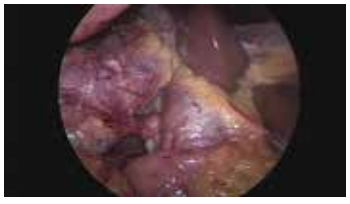
MRCP showing type I choledochal cyst

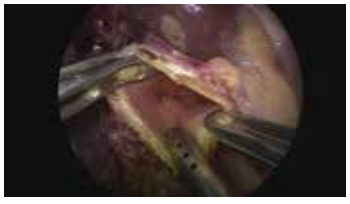


Todani classification

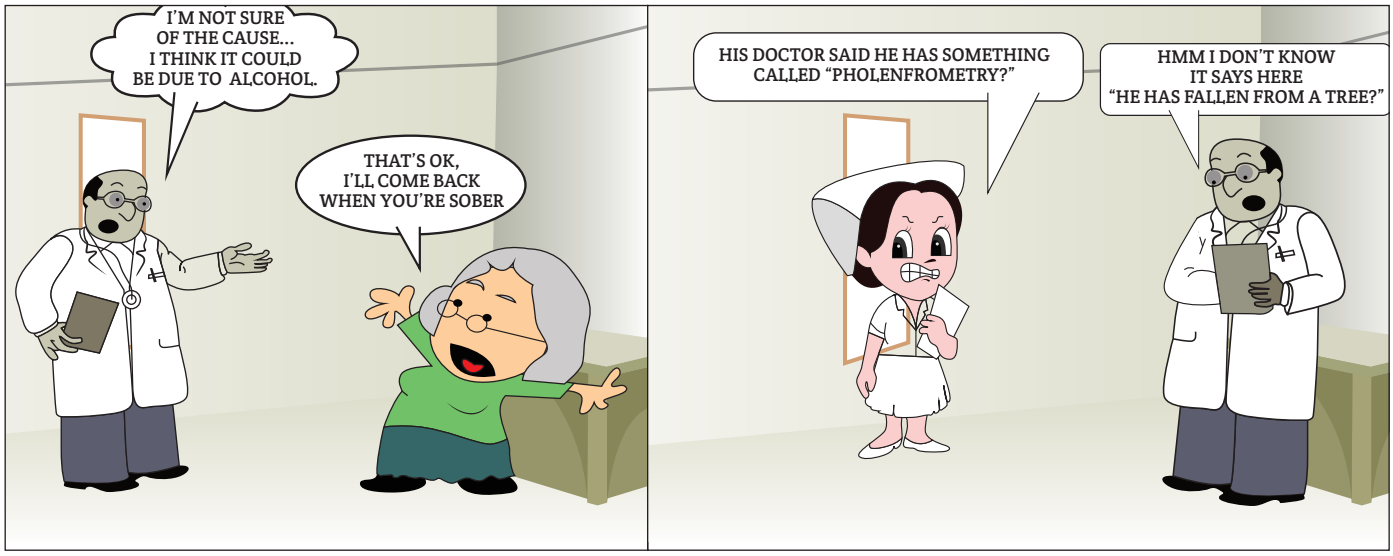
Scan this QR Code

to watch
THE TOTAL LAPAROSCOPIC EXCISION OF CHOLEDOCHAL CYST WITH RECONSTRUCTION SURGERY PROCEDURE






JOKE CORNER



HEALTHY RECIPE

Chocolate Chai Ice Cream

This chocolate chai ice cream recipe is a home run. It's sweet, but not too sweet, perfectly rich and the blend of chai spices is deliciously complex

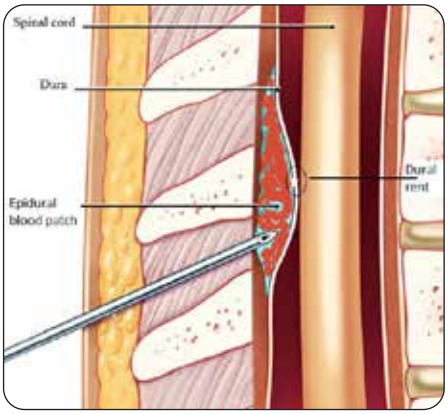
INGREDIENTS

2	c. heavy cream
1	c. whole milk
2/3	c. sugar
1/3	c. unsweetened cocoa powder
1	tsp. kosher salt
3	slices peeled ginger, sliced about 1/4- inch thick
1/2	tsp. freshly ground nutmeg
1	tsp. orange zest
7	tsp. loose black tea leaves
1	vanilla bean, scraped
1	cinnamon stick

INSTRUCTION

1. Combine cream and milk in a saucepan and heat over medium heat.
2. Add sugar, cocoa powder and salt and stir until everything is completely dissolved. Bring to a boil, turn down to a simmer and simmer for four minutes.
3. Add the remaining ingredients to the heated mixture. Remove from heat, cover and let steep for 25 minutes.
4. Using a fine mesh sieve, strain out the spices and tea leaves.
5. Chill in the refrigerator for at least two hours, then transfer to ice cream maker and churn according to your machine directions. Transfer to a freezer-safe container and freeze for at least four hours.
6. Optional: Grate a bit of cinnamon on top before serving.

Post dural puncture headche is a common entity that setter usually with _____ presently relief in severe and refractione case



Blood deposited in epidural space

EPIDURAL BLOOD PATCH FOR POST DURAL PUNCTURE HEADACHE

Dr.K.Senthil Kumar M.D., PGDMLE,
Senior Consultant and HoD, Anaesthesiology,
Dr.P.Sasi Kumar M.D., D.A.,
Dr.M.Rayan M.D., DNB.,
Dr.S.Vadhan Prasanna M.D., DNB.,
Department of Anaesthesiology,
Kauvery Hospital, Trichy

Post Dural Puncture Headache (PDPH) commonly known as 'Spinal Headache' was first described by August Bier in 1898. It classically presents as a postural headache following Spinal anaesthesia or an accidental puncture in duramater during an attempt for epidural anaesthesia. This postural headache typically presents between 24 and 72 hours following spinal anaesthesia or after an accidental dural puncture during epidural anaesthesia. Patients experience a typical bilateral fronto occipital headache sometimes radiating to neck with or without nausea and vomiting and is aggravated on sitting and standing position. Relief is obtained by lying down, either in the supine or prone position.

CASE REPORT

A 23 year old male who underwent an abdominal surgery under combined spinal epidural anaesthesia experienced typical PDPH 24 hours after the procedure. He was initially treated with adequate fluids, oral analgesics and Caffeine tablet. As the headache didn't settle with these conservative measures patient was given the option of epidural blood patch and the patient accepted for it. Under strict asepsis 15 ml of patient's blood was drawn from right antecubital fossa and injected eipdurally with patient in right lateral position. Blood patch was infused epidurally one space below the previous interspinous space where combined spinal epidural anesthesia was given. He was observed in recovery room in supine position for 2 hours and later evaluated for headache in sitting posture. He was absolutely pain free and felt very comfortable then on and he was discharged the next day.

DISCUSSION

Dural puncture creates a rent in dura, causing leakage of Cerebro Spinal Fluid (CSF) in turn reduction in CSF pressure causing traction over cranial nerves leading on to headache and neck pain. In addition, there is a compensatory intracranial vasodilatation effect to offset the decrease in CSF pressure which also adds up to the headache.- This is prevented by the below mentioned measures

a) Using small diameter needles
b) Using atraumatic needles (Pencil point Whitacre needles are preferred over Quincke's needle)
c) Passing the needle bevel parallel to longitudinal fibres of duramater
d) Stylet to be in position during introduction and removal of needle
e) Adequate hydration during perioperative period.

Management of post dural puncture headache

In general, post dural puncture headache settles with conservative measures. Nausea and vomiting are treated appropriately. Oral fluid intake is encouraged and IV fluids are given in more severe cases. Paracetamol and caffeine are the initial drugs of choice. Other NSAIDs are used if needed. These conservative measures are tried for 24 hours and if there is no further symptomatic improvement, Epidural blood patch is the treatment of choice.

THE TECHNIQUE

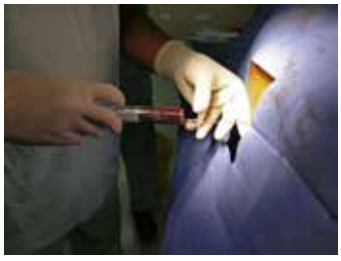
15 to 20 ml of patient's blood is drawn in an aseptic manner and injected epidurally. The patient is positioned in either of the lateral position in universal flexion. After strict asepsis epidural needle is introduced one or two space below the intersipinous space where spinal anaesthesia was previously administered, ie, the site of accidental dural puncture. About 15-20 ml is drawn in a separate syringe from the cubital fossa. Blood is infused through epidural needle into epidural space slowly over 60 to 90 seconds. Then patient is made to lie down supine for 1 to 2 hours. 2 hours later, patient becomes absolutely headache free and symptomatic relief is dramatic. The injected epidural blood clots and this blood patch forms a seal over the rent in duramater. This seal arrests the CSF leak and CSF pressure is maintained and hence headache is relieved.

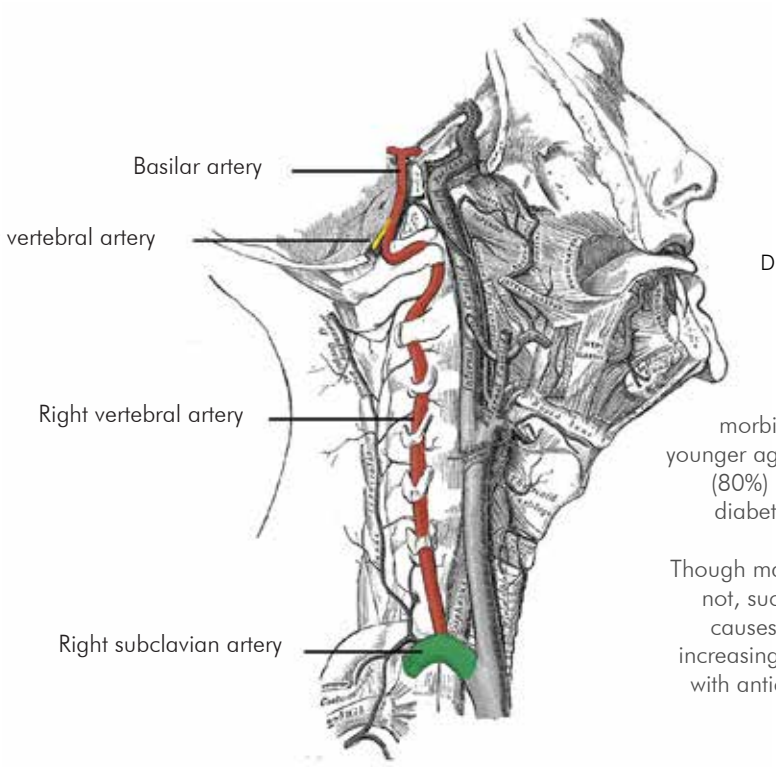
CONTRAINDICATIONS

Blood patch is contraindicated if there is associated coagulopathy, sepsis, fever and non-acceptance by the patient.

CONCLUSION

Epidural blood patch is a rewarding relief measure for patients who have PDPH where conservative measures have failed.


Patient's blood injected epidurally



BASILAR ARTERY STROKE

Dr. Sivarajan Thandeswaran., MBBS, MRCP (London)
Senior consultant Stroke & Neurovascular medicine
Kauvery Hospital, Chennai

Stroke is a leading cause of morbidity and mortality with increasing incidence in younger age group in developing India. Ischemic strokes (80%) are caused by poorly controlled hypertension, diabetes, hypercholesterolemia, lifestyle choices like smoking, excess alcohol and poor exercise. Though majority of risk factors are modifiable, some are not, such as atrial fibrillation, increasing age, genetic causes etc. With increasing longevity we are treating increasing number of atrial fibrillation in the community with anticoagulants like acitrom and newer agents like apixaban, dabigatran and rivoroxaban.

Stroke due to AF are often devastating as they tend to block major arteries like internal carotid, middle cerebral and basilar artery. Creating awareness on stroke identification and newer treatments like iv thrombolysis is the need of the hour. 80% of strokes can be reversed if prompt treatments are initiated in the right setting.

CASE REPORT

78yr old male on Acitrom for Atrial fibrillation with no other major co-morbidities presented to ER with acute onset giddiness, nausea, aphasia and right hemiplegia. He also had ophthalmoplegia and ocular bobbing. He was taken to CT Brain within 15 mins of arrival. Non-contrast CT Brain showed no evidence of bleed or early ischemic changes in left hemisphere. However Basilar artery was hyper dense raising suspicion of clot occlusion. Angiogram confirmed presence of clot in right vertebral artery and another clot at the apex of basilar artery.

Simultaneously blood samples were despatched for urgent INR testing to determine safety for iv thrombolysis and interventional radiologist was pre-warned for potential thrombectomy as the recanalisation rates for large clots are 50%. INR was 1.67 hence iv thrombolysis was initiated after family discussion and consent. While the patient was getting prepared for DSA in cathlab for potential thrombectomy, patient started recovering rapidly with return of speech and right sided motor functions. Subsequent brain imaging next day revealed complete recanalisation of right vertebral and basilar arteries with small infarcts in right superior cerebellar artery territory only. He was mobilised out of bed with physiotherapist. Ophthalmoplegia completely recovered in 4 days and patient was discharged home on day 5. Acitrom was converted to Apixaban for smooth anti-coagulation.

Door to CT time in this case was 15 mins and Door to Iv thrombolysis 45 mins. This is much better than international standards and with launch of HASU - Hyperacute Stroke Unit at Kauvery, it is envisaged to have door to needle time less then 20mins for all eligible patients. Stroke is a truly multidisciplinary disease which demands good team work starting from ER team, lab personnel, radiology, pharmacy and intensive care. Multiple departments ultimately contributed to this patient's timely recovery.

DISCUSSION

Basilar artery stroke carries a high mortality (90%) without rapid diagnostic work up and appropriate treatment. Particular issues relevant to basilar stroke include variable and stuttering symptoms at onset resulting in delays in diagnosisand uncertain best management. Often symptoms range from transient dizziness, vertigo, diplopia, paraesthesia and syncopal episodes. Clinical findings like truncal ataxia, nystagmus, opthalmoplegias, ocular bobbing and unexplained dizziness or syncope should prompt posterior circulation stroke investigations. In this case, particular issue was related to use of anticoagulation. If INR > 1.7, iv thrombolysis would be relatively contraindicated with potentially higher bleeding risk. In such scenarios, direct mechanical clot removal is ideal.

ROAD SAFETY WEEK AWARENESS SHOW

Road safety week is celebrated with the great joy and enthusiasm every year in India at many places. People are encouraged about how to drive on roads by organizing variety of programmes related to road safety. During the whole week , a variety of educational banners, safety posters, safety films, pocket guides and leaflets related to the road safety are distributed to the on road travelers. They get motivated about the road safety while travelling on road means having planned, well-organized and professional way traveling. Those who travel in unprofessional way are requested to use road safety measures and follow traffic rules by educating them about consequences without adequate safety measures. Awareness is created on the importance of traffic rules, firstaid and road safety. the below photos were captured during one of our public mock session.

DEALING WITH **MEDICOLEGAL ISSUES IN DAY TO DAY PRACTICE**

QUERY

If a patient wants to leave the hospital on his own without the consent of treating doctor -LAMA., can he insist for discharge and treatment summery or operative notes.
I have noticed, majority of times, this is not done spl in Govt setups.

Answer

I have seen that doctors become uncomfortable when patient decide to use his fundamental right whether to accept treatment or not from a particular doctor / hospital. It is usually labeled as LAMA- left against medical advice. Patient is denied treatment papers and discharge slip.

It is wrong. All such patients should be treated as discharge on request. You can record it in case sheet that patient has gone on its own. You should provide discharge summary along with all papers.

LAMA should be primarily used for absconded patient where you can deny papers later on.

QUERY

I am working in PSU hospital in a semi-rural location. The project is close to a big city & patients are frequently taking treatment for various ailments from the private practitioners. Very frequently they turn up at our hospital demanding administration of Injectable as advised by their treating doctors. Many times we may not agree to the medication being administered and being a PSU/Govt. hospital, it leads to confrontations.

My query is: "Do we have to prescribe the injection again on our prescription slip for it to be given?" It has already been prescribed by a qualified doctor elsewhere. Can the injection be administered with request & undertaking of the patient as
"I XYZ, hereby give my request and consent towards administration of the injection to me/my patient as advised & prescribed by Dr. ABC. I have been explained the side effects & adverse effects of the injection to be administered by my treating & prescribing doctor. The entire responsibility towards the administration of the injection including adverse effects shall lie on me. This hospital, its doctors and staff shall not be responsible of any adverse reaction or event that may occur subsequent to administration of such an injection."

Do such consents carry any validity in case of any adverse reactions? Can the injection be simply given with this consent and original prescription of private practitioner?
In case of any adverse reaction, who would be responsible?

In certain cases we may agree to the Injectable to be administered. Is there a boundation on a doctor to prescribe that medicine? The patient has already bypassed our hospital & available specialist services citing various reasons has merely come back for essentially nursing services.

Answer

Every medical practitioner is independent to follow his own treatment policy. You may or may not agree with your colleague or another qualified doctor. In your case, if you think, injection is required in this case, you can endorse it on own letter head so that it can be given by nurse. If you think, it is not required, just refuse it. If any reaction / negligence occur, you would be held liable if injection has been prescribed by you.
Please remember that your hospital is a PSU hospital which is manned by qualified doctors and patients have no right to treat it as injection facility centre where they can get any injection at will.

Your hospital is well within rights to refuse injections not prescribed by doctors of your hospital. The consent from patient which you mentioned has no legal value.

QUERY

I am working as a gynecologist at government hospital.
In our unit one baby was delivered with major congenital anomalies.
She was not advised anomaly scan as level 2 ultrasound is not available in our hospital and we can't advice it from private center. What are legal implications in present scenario? Who is responsible for negligence? Treating doctor or authorities.

Answer

Please note that if a doctor is working in a govt setup, it does not mean that proper advice would not be given if facilities are not available at that centre. In above mentioned case , level 2 ultrasound was must and would have been recommended. It is patient choice to get it done from private if facilities are not available at govt setup. Non advice of level 2 ultrasound is a negligence in this case which is done by gynaecologist. Govt authorities are rarely held liable for negligence as govt can say that they cannot provide all facilities al all places.
In this case, gynecologist should have sent this case to higher centre for level 2 ultrasound.

QUERY

I am working as an orthopedic surgeon in a corporate hospital. We get frequent orthopedic emergencies like acute dislocation, compound fracture and vascular injuries. These are orthopedic emergencies as per my knowledge. But we can't deliver treatment due to financial clearance from hospital. In case of any delay in delivering the treatment; who will be responsible- me, hospital or patient himself. And how should I protect myself legally. Kindly advice.

Answer

I am surprised that such things are happening in corporate hospitals. Please bring it to knowledge of hospital authorities like Med Supdt or Director. It is difficult to say who will be responsible in case of negligence either hospital or doctor or both as it will depend on circumstances.
If hospital authorities do not respond and correct the system, change the hospital.

Courtesy
Prof (Dr) R K Sharma
MBBS (AIIMS) , MD (AIIMS), FIAMLE , FICFMT ,
Medico-Legal Consultant
President, Indian Association of Medico-Legal Experts , New Delhi

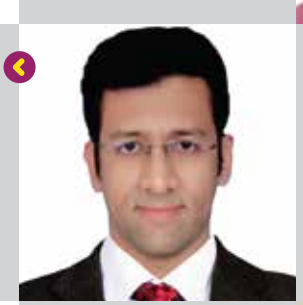
WARM WELCOME NEW CREW MEMBER

Dr. Gerard Joseph Gonsalvez, MBBS, MD
Consultant Intensvisit
Trichy

Dr. M. Ranjith Kumar,
MD, DM (Pead. Neurology)
Pedicatrics Neurologist
Trichy

Dr. Saravana Kumar,
MD, DM (Critical Care)
HOD- Critical Care
Trichy

Dr. Srihari
MS., MCh
Neuro Surgeon
Trichy



Dr.A.J.Lawrence
MD(Radiology).,
Consultant Radiologist
Trichy

Dr.K.Arivarasan
"MD(Medicine).,
DM(Gastroenterology).,"
Consultant Medical
Gastroenterologist
Trichy

Dr.Archana Kalaichelvam
MD(Anaes.).,
Critical Care Physician
Trichy

Dr.P.Sathya Sudhakar
MBBS.,DGO.,DRM(Germany)
Obstetrics & Gynaecologist
Salem

Dr.P.Anandeswari
MD (TB & Chest diseases)
Pulmonologist
Salem

Dr.M.Rajendran
"MD.,(Gen.Medicine),
DM(Cardiology)"
Interventional Cardiologist
Salem

Dr. Dhanapal P.V.
M.S.,(Gen)F.A.I.S
General Surgeon &
Laparoscopic Surgeon
Salem

Dr. Subha S.S.
MD.,D.G.O.,
Obstetrics & Gynaecologist
Salem

Dr.R.Kandasamy
B.Sc.,MBBS.,PG Dip.DIAB
General Physician
Salem

Dr.S.A.K.Noor Mohammed
M.D.(Gen. Med),
D.M.(Nephro)
Nephrologist
Salem

Dr.S.Ravikumar
MS.,M.Ch(Gastro).,
Surgical Gastroenterology
Salem

Dr. K. Mahendran
MBBS.,MS(ENT).,DLO
ENT & Endoscopic Surgeon
Salem

Dr Ramesh Ramanathan
MBBS.,PGDHS(Echo).,
Dc.CM(Cardiac Medicine).,
Dc.RM(Resp Medicine).,
FSAMS(Gen Sur).,
MS., FCGP., FCCP
Associate Consultant
Vascular Surgery
Chennai

Dr.K.M.Lakshmanarajan
MBBS.,MD.,
DNB(ANESTHESIA),
FNB(CARDIAC ANESTHESIA)
Anaesthesiologist
Salem

Dr.G.Sivaraman
MS.,M.Ch(Plasitc Surgeon).,
Plastic Surgeon
Salem

Dr.Anantha Subramanian
MBBS., MD (Pul Med)
Senior Resident
Pulmonology
Chennai

Dr.K.Rajan
MBBS., DMRD.,
MD (Radio Diagnosis)
Senior Consultant
Radiology
Chennai

Dr. Vivekanandan
MBBS., MRCS., FRCS
Senior Consultant
Liver Transplant Surgeon
Chennai

Dr.A.M.Shantha Kumar.,
M.S.Ortho
Consultant-Orthopaedician
Hosur

Dr.Arunkumar Sengottaiyan
MBBS M.S(Gen Surgery)
M.Ch(Urology)
Consultant-Urologist
Hosur

Dr.Manikandan
MBBS., DNB., MCH
Junior Consultant
Cardio Thoracic Surgery
Chennai

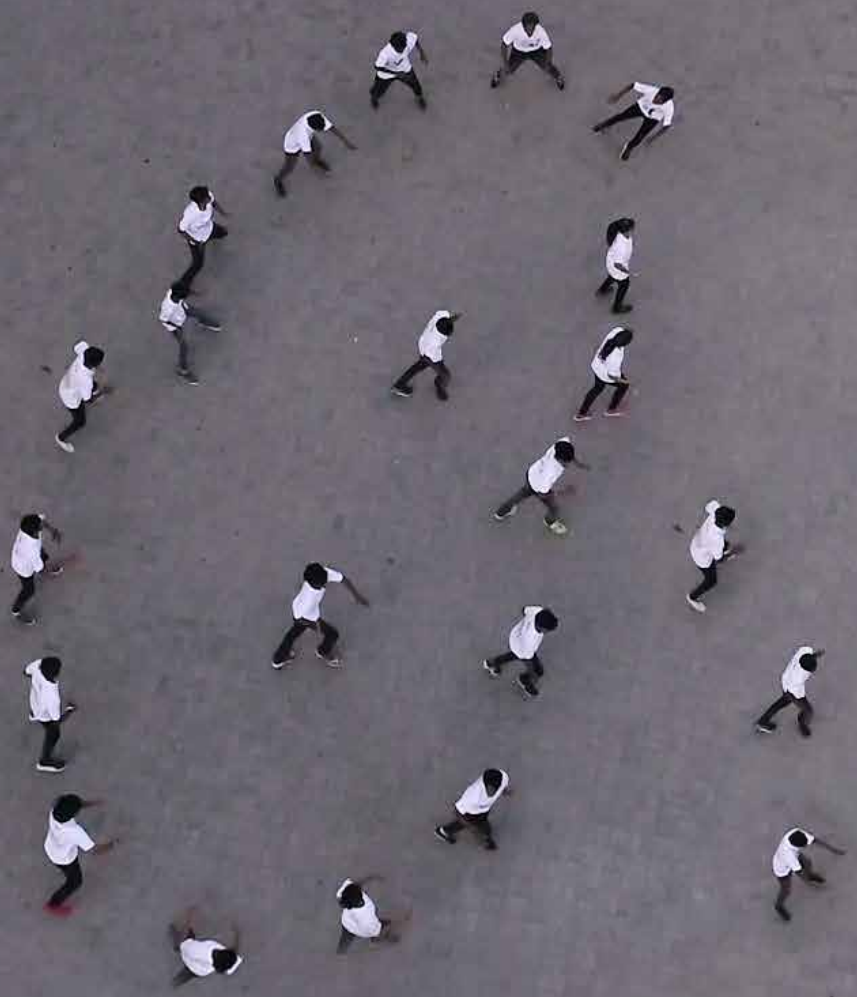
Dr.C.P.AmruthuKumar
MBBS DA DNB
Consultant-Anaesthetist
Hosur

Dr.R.Anbuchezhian
MBBS MS ENT
Fellowship in Implantation
Otology.
Consultant-ENT
Hosur

Dr.M.RekhaMahesh
MBBS MS(OBG)
Consultant-Obstetrics
& Gynaecologist
Hosur

(8th Mar) World Kidney Day Awareness-Flash Mob

Theme - Kidneys & Women's Health: Include, Value, Empower
Every year in the month of March, Worldwide theme based awareness will be enhanced to commemorate "World Kidney Day" (March 8th), which this year emphasize on kidneys and women's health and on the same day we had Women's Day. So we integrated both women's day and kidney day as the theme is also based on women's health.



Kauvery Kidney centre, tennur always step forward for social cause. This time, we have initiated various events among general public to commemorate "World Kidney Day" & "World Women's Day".


DEATH WISH

Best Multi Speciality Hospital - ROTN

An award for excelling **in Human Care!**

Kauvery Hospital's zeal for personalized care and innovation has helped win many laurels in the recently held Times Healthcare Awards 2018 (Tamilnadu) on May 5th 2018 at Feathers Hotel, Chennai. The prestigious event was presided by Dr. J. Radhakrishnan, Principal Secreatary to Tamilnadu Government as Chief Guest and Dr. V. Shanta, Chairperson, Adyar Cancer Institute as Special Guest. The event was attended by leading medical fraternity representing the top health care providers in Tamilnadu.

TIMES HEALTHCARE ACHIEVERS TAMIL NADU 2018

About **The Award**

The Times Healthcare Achievers Chennai 2018 is an endeavor to salute those individuals and institutions who have made outstanding contributions in their respective fields to enhance the quality of medical services and healthcare delivery. It is a roll of honor which aims to recognize doctors and institutions that have played an integral role in developing and diversifying the healthcare landscape in Tamilnadu. The previous city editions of the Awards included Hyderabad an.d Delhi NCR.

Legends Award - Dr. P. R. Ramasamy

Legends Award - Dr. D. Senguttuvan, E.D
(Received by Dr. T. Senthil Kumar)

Best Speciality in a Multi Specialty Hospital - Neurology

Best Speciality in a Multi Specialty Hospital
Cardiology & Cardiothoracic Surgery

Best Speciality in a Multi Specialty Hospital - Orthopedics

Stalwarts - Prof Dr. N. Sekar, Vascular Surgery

Stalwarts - Dr. T. Senthil Kumar
Cardiology & Cardiothoracic Surgery

Stalwarts - Dr. Kannan D, Gastroenterology

Stalwarts - Dr. P. D. Aravindan,
General Medicine & Diabetology

Young Achievers - Dr. T. Rajarajan,
Nephrology

Catalyst – Series IV

kauvery hospital

Advanced Laparoscopic Surgical Skills course

Date: 17th, 18th & 19th August 2018
Venue: Hotel Sangam, Trichy

CATALYST
(Centre for Academy of Training in Advanced Laparoscopy and Surgical Techniques)
To be Accreditated by Tamil Nadu Dr. MGR Medical University

Course Director: **Dr. S. Velmurugan**

- Previous courses were well appreciated with and excellent feedback from candidates
- Plenty of Hands on Training
- One to one trainer (Mentor)
- One day live advanced Lap surgeries including hernia repair , fundoplication, Bariatric surgery, TLH & Gynaec surgery

Limited to 40 Candidates only

(First come first serve basis allotment)

Register Now...

For registration & queries
Dr. S. Vetrivinayakan – 98949 68124 | 97150 91246
Ms. Saraswathy – 73739 61117 | 89407 09624