

kauvery

# CAPSULE

Medi Magazine  
A quarterly magazine  
from

**kauvery**  
hospital



## CAPSULE MAGAZINE

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# 01

From  
the Editor's Desk

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Anesthesia and  
Challenges

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Acute Myocardial  
Infarction in Infancy &  
Childhood - A reality

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## From the Editor's Desk

Dear Readers,

**W**elcome to the 20th edition of capsule. It gives me immense happiness to connect with you through this capsule magazine. 2017 has been very eventful which consists of Annual Day of our hospital, and series of event to commemorate the Kidney Day, observed on March 9th.

18th annual day of Kauvery hospital, was celebrated on 5th of March. It's a day to rejoice, celebrate and bring the joy of togetherness within the Kauvery Family.

Kauvery hospital to commemorate Kidney day themed on "Obesity and Kidney Disease", organized a series of events like water bottle campaigns, one week urology camp at Thennur Kauvery Hospital, for the public from 6th to 10th March 2017.

A Talk Show (Pattimandram) was conducted on 9th March by renowned orator of international repute, Mr.Suki Sivam," to enhance the health awareness among the public. More than 750 people participated in the splendid event.

A Urology CME titled "Renal Update -2017", focusing on obesity and renal disease was conducted on 19th of March at Trichy. More than 150 practicing doctors were extensively benefitted out of the program.

Creating awareness and enhancing the health consciousness among public will help sustain the health and leap towards better living conditions. Together lets work towards for the betterment of humanity.

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## “Bombay blood group -A rare entity”

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The discovery of the ABO blood group, over 100 years ago by Karl Landsteiner has reduced mortality secondary to blood transfusion significantly. It is well known that people with blood group A has antigen of type 'A' antibody of type 'B' in his /her blood. People with AB have both antigen A and B in their blood and no antibodies.

### Case Report:

A three year old boy was referred to our department for further management of severe anaphylaxis reaction, which occurred immediately after commencing blood transfusion. Appropriate group(O positive) packed red cell transfusion was commenced elsewhere in view of low haemoglobin (6.4 gm/dl), which was found on evaluation for high grade intermittent fever for 3 days with no localising signs. Packed red cell transfusion was terminated immediately and he was referred here after adequate management of anaphylaxis.

There was history of gradually progressing jaundice and dark yellow coloured urine since after blood transfusion. There was no other localising symptoms. There was no significant past history. On examination, he was icteric and febrile. His vitals were normal. His systemic examination

was normal. His investigations revealed microcytic hypochromic anemia with other cell lines in normal limits. His reticulocyte count was on the higher range. He had hyperbilirubinemia with high urine bilirubin. His renal functions was normal. In view of acute hemolysis, coomb's test was done which revealed negative DCT and significantly positive ICT. Hence minor & rare blood group disorder was considered and blood grouping with typing (forward and reverse) was repeated here, which revealed a rare blood group – “Bombay blood group”. [Fig (1)]

He was conservatively managed. In view of increasing trend of haemoglobin and iron deficiency anemia, blood transfusion was deferred. His repeat liver enzymes gradually improved. He was started on oral iron supplements and was discharged. He was doing well on his follow up.

**Discussion:**

The Bombay Blood Group is the rarest of the rare in blood groups, which was first reported in Bombay, India. The Bombay phenotype is characterized by the absence of A, B, and H antigens on its red cells and the serum of these individuals have anti-A and anti-B. But the serum that agglutinates red cells of 'O' group individuals through a wide thermal range may be due to presence of strongly reactive anti-H antibodies. It was identified that the h allele is a result of mutation of the H gene (FUT1) that would express the H antigen on the red blood cell of ABO blood groups. Bombay phenotype is homozygous (hh) for the 725G mutation in the FUT1 coding region.

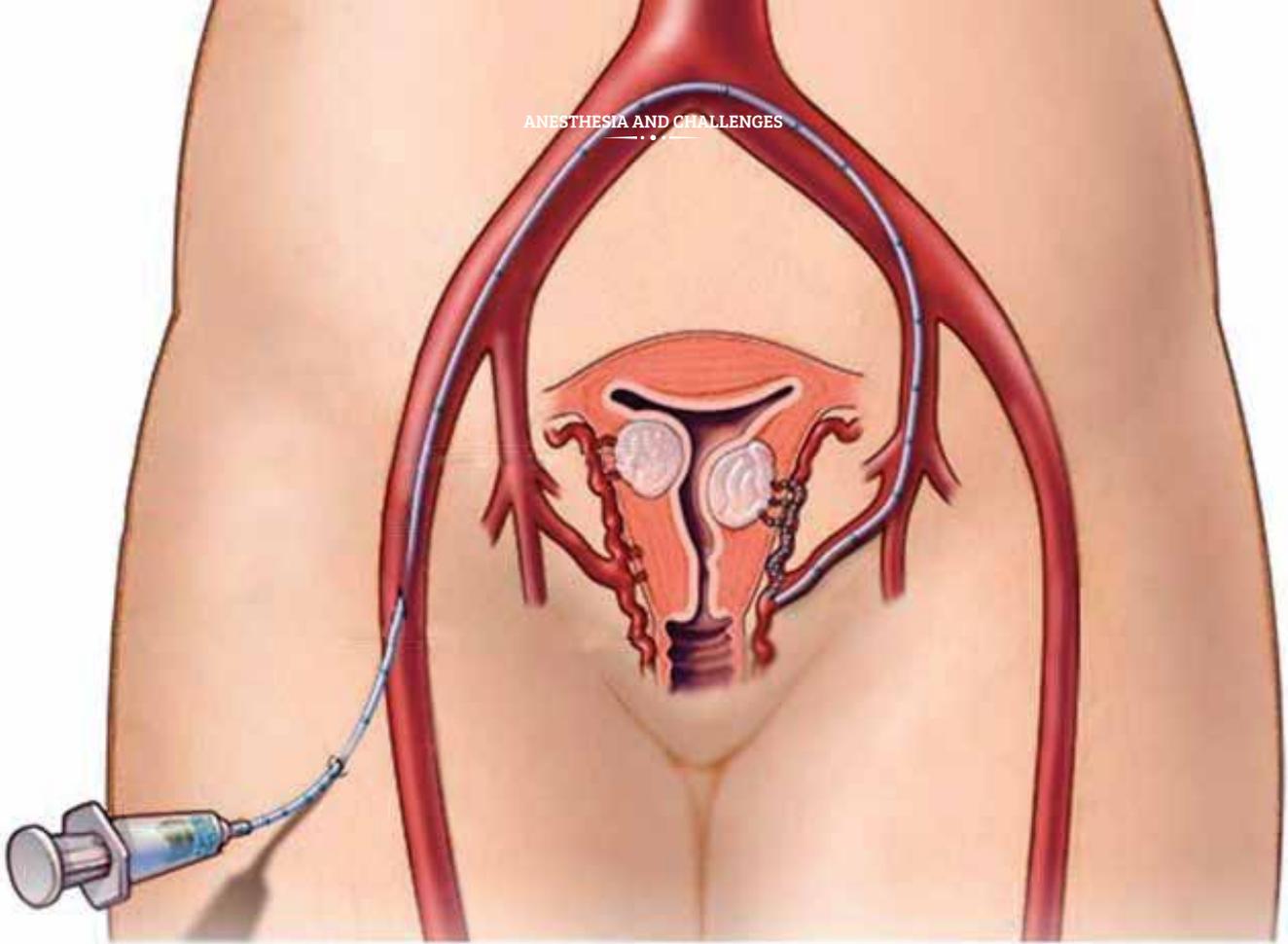
During cell grouping or routine grouping, Bombay blood group would be categorized as O group because they wouldn't show any reaction to anti-A and anti-B antibodies just like a normal O group. When a cross matching is done, then it would show then it would show cross- reactivity or incompatibility. Therefore reverse grouping or serum grouping has to be performed to detect the Bombay blood group. The concern with Bombay blood group is that the individuals having this group can only receive either autologous blood donation or blood from an individual of Bombay phenotype.

**Conclusion:**

Bombay blood group individuals can receive blood only from individual with Bombay Phenotype. As Bombay blood group is usually misinterpreted as 'O' group, kindly re-check serum typing with reverse grouping along with Anti-H lectin for all 'O' blood group patients requiring blood transfusion to avoid dreadful complications due to incompatibility. There is a registry for Bombay blood group maintained by [www.bombaybloodgroup.com](http://www.bombaybloodgroup.com). It is easy to get donors through this registry. Also, kindly advice Bombay blood group people to get registered in this website.

Laboratory Investigation Report							
PATIENT NAME: [REDACTED]				DATE: 22.04.2017			
AGE/GENDER: 3 years / Male				SAMPLE ID NO: [REDACTED]			
HOSPITAL: KMC, Cantonment, Trichy							
DIAGNOSIS: Not Mentioned							
TEST REQUIRED: Blood Grouping.							
RESULTS:							
CELL GROUPING				SERUM GROUPING			
Anti-A	Anti-B	Anti-AB	Anti-D	A cells	B cells	O cells	Auto control
0	0	0	4+	4+	4+	3+	0
ADDITIONAL TESTS:							
Anti – H Lectin: Negative							
INTERPRETATION:							
Patient's Blood Group is 'O <sub>h</sub> ' RH 'D' POSITIVE (i.e., <b>Bombay Positive Blood Group</b> ).							
FUTURE TRANSFUSION STRATEGY:							
Patient must receive 'O <sub>h</sub> ' RH 'D' POSITIVE (i.e., <b>Bombay Positive Blood Group</b> ) packed red cell unit(s) only.							

Fig (1):Blood grouping report of our patient. Cell grouping (Forward grouping) and serum grouping (Reverse grouping)



## Uterine Artery Embolization (UAE)

Dr. MMBBMMMMMMMMMMMMMBBBS, DCH.

A 26 years old female P1 L1 A3 referred from peripheral hospital on 22.01.17 for PPH after preterm normal delivery of twins . Patient was diagnosed to have placenta accreta antenatally. Placenta retained in toto and medical management given for placental evacuation but patient developed PPH. Conservatively patient managed and send home.

Once again she started bleeding and the haemoglobin level falls to 6 mg and went for shock and hypotension. Initial resuscitation done and she was referred to our hospital for further management. She was resuscitated with blood and blood products and bleeding was under control. She was explained about hysterectomy if further episodes occurs. She wants to retained uterus and to conceive later as she is having only one live child. Uterine artery embolisation was explained to her and relatives as an alternative and effective method to overcome this problem.

She was taken up for UAE and embolisation using gelfoam done on bilateral uterine arteries and post procedure complete cessation of bleeding PV occurred. Patient had mild fever next day as expected and covered with adequate antibiotics . Patient become symptomless on third day and discharged.

Patient was followed up and she expelled the placenta in bits after one month and check scan done which shows complete expulsion of placenta and patient is doing well.

Uterine artery embolisation (UAE) is an interventional radiological technique to occlude the arterial supply to the uterus.

**Indication:**

1. Fibroids.
2. PPH.
3. Adenomyosis.
4. Pelvic vascular pathologies.
  - a) Primary.
  - b) Secondary to any procedure / surgery.

**Contraindications:**

No definite contraindication.

**Procedure:**

After routine preprocedural workup and specific investigations like USG / MRI, patient taken to cathlab . Under local anesthesia any one of the femoral artery is punctured and 6F sheath is introduced using seldenger technique. Using a specialized catheter named Roberts Uterine Catheter (RUC) which facilitates access to both uterine arteries with tapering of size 5F at the proximal end to 4F at the distal end. As a routine selective angiography done and which will shows findings like hypertrophied arteries , pseudoaneurysm , AVM , direct extravasation etc. After engaging in appropriate place embolisation will be started. Embolising materials routinely used are gelfoam for temporary and polyvinyl alcohol 300-350 mics (PVA) for permanent embolisation. Once embolisation is over check angiogram done for confirmation of complete cessations of vascular abnormality.

Postprocedural complication like pain , fever , abnormal bleeding etc, may occurs which usually settles with antibiotic coverages and analgesia. Long term complication like infertility also a rare complication . Some patients may still need surgical management for controlling bleed in case of PPH.

Overall outcome is excellent in all the indications like avoiding surgery in PPH., resumption of menstruation, Reduction in volume of fibroid about 75% within six months and successful pregnancy after UAE in PPH.

To conclude UAE will be consider as a primary option in patientss with PPH who wants to concise later and for large fibroids in case of infertility.



## QUIZ COMPETITION

**Quiz Question**

Chest X-ray of 45 year old female admitted for dyspnea on exertion and on & off hemoptysis.

What is the diagnosis?

Send your answers to [capsule@kauveryhospital.com](mailto:capsule@kauveryhospital.com) or WhatsApp to +91 96887 25479



**Previous Issue's Question & Answer**

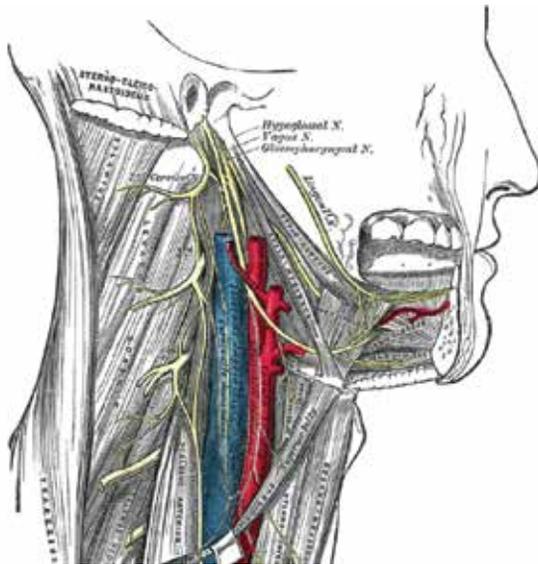
**Question:**

1. What is this investigation?
2. What is the diagnostics?
3. What is the best time to treat this condition?
4. What are all the complications of this condition?

**Answer**

**Winner**

Dr.



## Glossopharyngeal Neuralgia - A Rare Facial Pain Syndrome

Dr.S.Balamurugan, MS,MCh(Neuro),FNS

A 67 years old, Mr.Rajendran, came to Kauvery with complaints of severe electric shock like pain in the angle of left jaw, inner side of mouth, Left side of the tongue and throat. He was having this problem for the past five years and was diagnosed as Glossopharyngeal Neuralgia.

He was on medications for five years and the intensity and frequency of this pain episodes were increasing day by day and the last five months he was taking liquids only due to the fear of this pain.

This condition, Glossopharyngeal Neuralgia is usually caused by the compression of the 9th cranial nerve by an adjacent artery near the brainstem. Rarely a tumour, an elongated styloid process or an infection in the region of this nerve may cause this symptom

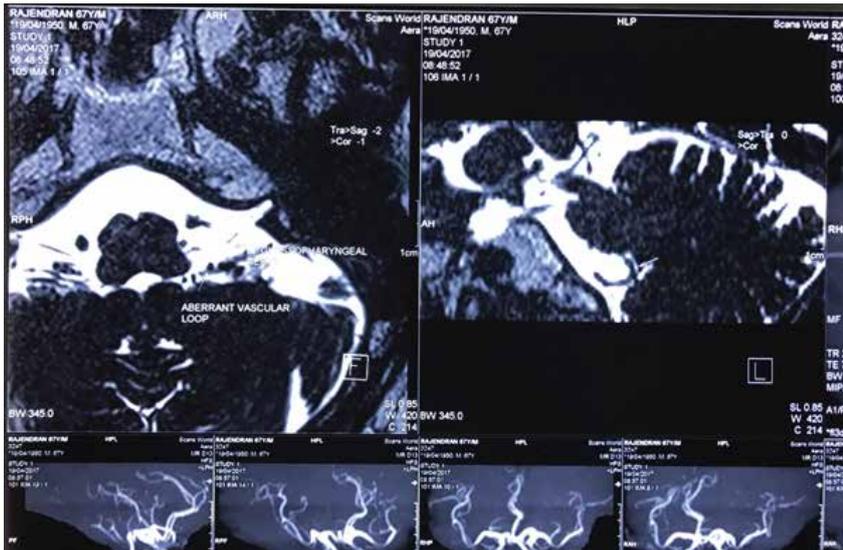
The pain occurs in episodes and may be severe. Painful attacks may occur spontaneously but are more often associated with a specific stimulus such as chewing, speaking, coughing, swallowing, yawning or laughing. The attacks can occur frequently throughout the day or once every couple of weeks and they can also disturb sleep. This pain is many a times confused with Trigeminal Neuralgia and mistreated.

Intense irritability and hyper-stimulation

of glossopharyngeal nerve may induce vagal response as cardiac dysrhythmia, bradycardia, hypotension. Cerebral hypoxia, Slowing of EEG activity, Syncope and Convulsions can occur in extreme cases.

Treatment options are medical therapy with Carbamazepine, Gabapentin or Surgical therapy like Percutaneous Rhizotomy or Microvascular Decompression (MVD). Complications of MVD are Dysphagia, Voice impairment, Dyspnoea, Cardiac arrhythmias and Stroke due to Vascular injury.

In our patient the reason for his painful episode was PICA( Posterior inferior cerebellar artery) compressing the 9th cranial nerve near brainstem on the left side.It has been diagnosed by MR Angiogram and we advised surgery for him. We did Retromastoid suboccipital craniectomy and Microvascular decompression , separated the PICA from the 9th cranial nerve.



The patient became absolutely pain free on the first postop day and started taking liquids and solid diet also from that day itself without any discomfort. He got relieved of those painful episodes and has been discharged on the fourth day without any morbidity

## Inguinal dermoid

Dr. Devaji Rao

The most common groin swelling is inguinal hernia. The other causes are undescended testis, enlarged lymph nodes, lipoma and encysted hydrocele of the cord. Rarer causes are inguinal endometriosis in women, lymphangioma and neuroblastoma. A dermoid cyst of the spermatic cord is a very rare condition, and this should be considered in the differential diagnosis especially in children, when it is nontender and not reducible. We present here a case of inguinal dermoid in an adult male.

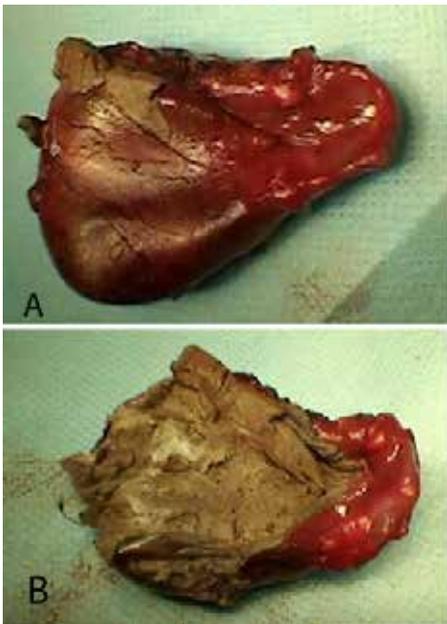
**Case report**

A 40 year old male presented with a swelling with mild pain in the left inguinal region for many months. On examination, it was a nontender irreducible swelling in the inguinal region with normal testes bilaterally. A clinical diagnosis of incarcerated inguinal hernia was made and operated. During surgery, it was found to be an encapsulated swelling adherent to the cord structures and contained pultaceous material, with hair in the capsule. It was excised without any difficulty. The histopathology showed thin-walled cystic structures containing inspissated keratin, lined by mature keratinising squamous epithelium. The wall contained skin appendage structures with both eccrine glands and sebaceous glands. There was no evidence for dysplasia or malignancy in the lining of the cyst. The surrounding fatty connective tissue contained no residual or atrophic testicular tissue. The histological appearances correlated with a dermoid cyst.

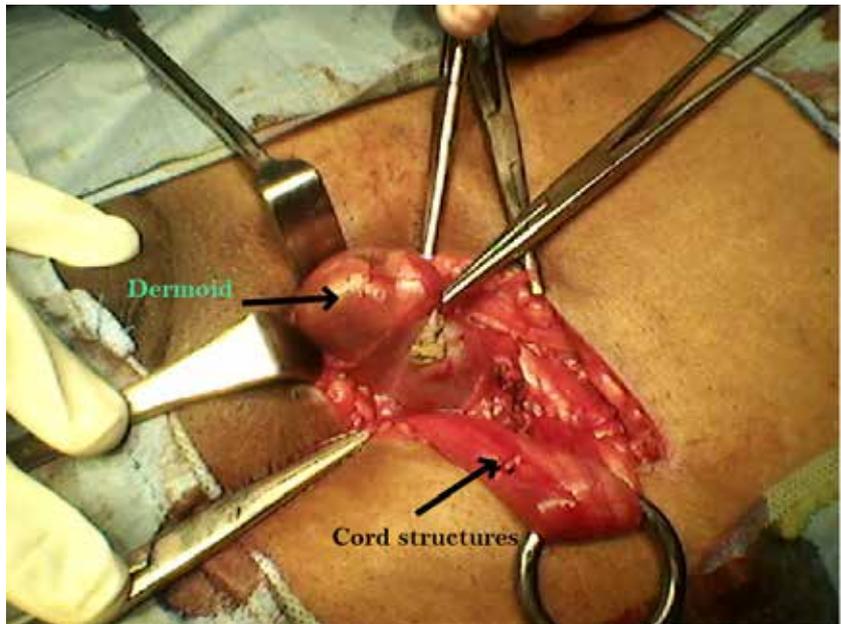
**Discussion**

Though the most common diagnosis of a groin swelling is an inguinal hernia, other causes include femoral hernias, undescended testis, enlarged lymph nodes, lipoma, femoral artery aneurysm, saphena varix and varicocele. Rarer causes include dermoid, inguinal endometriosis in women and thrombophlebitis of the long saphenous vein and lymphangiomas and neuroblastoma. A dermoid cyst of the spermatic cord is an unusual cause of groin swelling, with only a few cases reported to date. Dermoid is a name given to cysts lined by squamous epithelium occurring in various parts of the body. Dermoid cysts in and beneath the skin occur mostly on the face, neck or scalp. Dermoid cysts can also be intracranial, intraspinal or perispinal. Intra-abdominal dermoid cysts can also occur on the ovary or omentum. By definition, dermoid is a tumor consisting of displaced ectodermal structures along the lines of embryonic fusion, the wall being formed of

epithelium-lined connective tissue, including skin appendages, and containing keratin, sebum, and hair. Histologically the wall of a dermoid cyst consists of all components of the skin, including hair follicles, hair, sweat and sebaceous glands. Dermoid cysts of the spermatic cord are not painful, though they have been known to mimic an incarcerated inguinal hernia. It is also reported to occur in conjunction with an ipsilateral paratesticular epidermoid cyst. Dermoid cysts are always benign lesions. No case of malignant transformation has been reported. In symptomatic cases, surgical excision remains the only treatment option. In conclusion, dermoid cysts of the spermatic cord should be considered as part of the differential diagnosis of inguinal masses especially in children, when it is a long-standing, nontender, and irreducible inguinal mass.



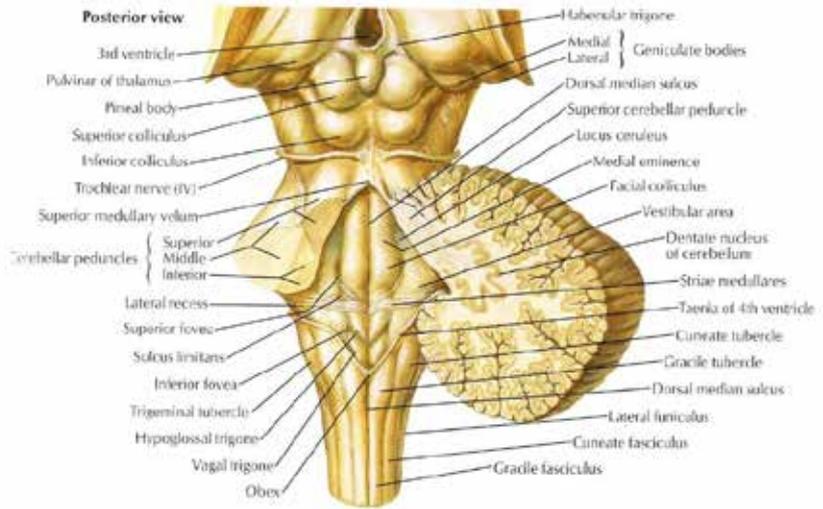
Excised specimen (A) Gross (B) Cut specimen



Operative photograph

# Intra Operative Neuro Monitoring - “The Gaurdians Of The Brain”

Dr. -----



26 year old lady presented to our casualty in a moribund state, drowsy, arousable, obeying minimal commands, with papilledema for only eight hours. The only significant history she had was early morning headaches while retching when she was brushing her teeth for almost three months.

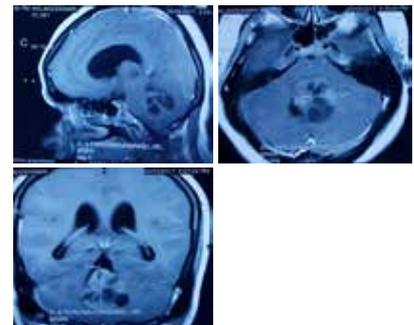
Scans showed an obstructive fourth ventricular floor lesion causing obstructive hydrocephalus. She was taken up for emergency Endoscopic Third Ventriculostomy following which she became fully normal with no deficits – including any Cranial Nerve deficits.

So now she needed treatment of her main problem – the IV Ventricle lesion with no deficits

The Fourth Ventricle is a complex space with nuclei in the centre, which is helpful in mastication and swallowing. The floor is made up of Trigeminal, Facial, Vestibular, Vagal, Hypoglossal nuclei apart from the Gracile & Cuneatus Tubercles and other vital structures.

This is where Neural Integrity Monitoring (NIM-ECLIPSE) comes in as the guardian of brain functioning. Initially under anaesthesia the patient was positioned and electrodes for monitoring the Trigeminal, Facial, Glossopharyngeal, Accessory and Hypoglossal nerves. The Sub Occipital Craniotomy was done and the dura opened. The patient was brought to a lighter anaesthesia plane and “TeloVelarApproach” commenced. The fleshy, vascular ependymoma was visualised and under IONM (Intra Op Neuro Monitoring) near total excision was done except for a very miniscule part very firmly adherent to the floor. Throughout the surgery all the cranial nerves were intact with no loss of any potential. Post operative the patient recovered uneventfully with not even a minimal cranial nerve palsy and was discharged on the IV post op day.

IONM: In 1848 Du Bois Raymond elicited the first neuronal Action Potential. In 1935 first use of Intra Op EEG and in 1978 first use of BAEP are already documented. Since then newer techniques with modern technology has brought monitoring into the daily OT use itself. Now it is used in various forms such as MEP, SSEP, BAEP, SSEP for Vascular procedures to pick up early hypoxia, localisation of SensoriMotorCortex, VEP, EEG etc has really opened a plethora of options for neuronal integrity monitoring. These guardians make the surgeon’s job easier and less stressful and more precise and help in more aggressive surgical clearance and improve the patient’s quality of life by preventing new morbidities and mortality.



## Rotational Atherectomy

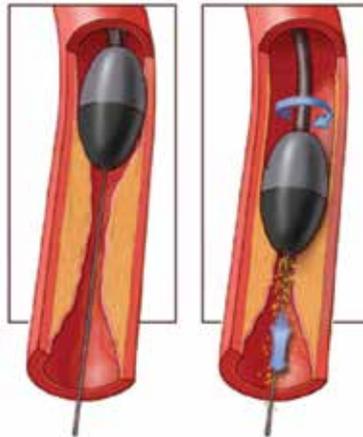
Calcified and totally occluded coronary arteries can be safely treated using angioplasty

Dr. Amal. A. Louis

Until recently calcified and totally occluded coronary arteries were conventionally treated with bypass surgery as calcification prevent balloon and stent expansion.

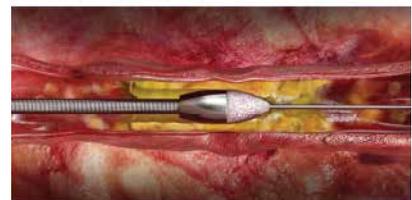
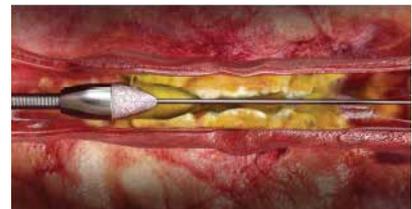
Conventional angioplasty techniques using plain balloon angioplasty and stenting in heavily calcified vessels is associated with poor longterm outcome due to restenosis resulting from stent underexpansion and neointimal proliferation. Drug eluting stents have effectively eliminated neo intimal proliferation and instent restenosis but an underexpanded drug eluting stent results in stent thrombosis and early restenosis. Rotational atherectomy (rotablation) using a diamond tipped drilling device helps in debulking and clearing calcified plaques, thereby facilitating adequate stent expansion with improved long term outcome post percutaneous coronary intervention (PCI).

Mr SN is a 58 yr old gentleman who presented to Kauvery Hospitals, Chennai with exertional chest pain. His TMT was positive and his coronary angiogram showed severe triple vessel disease with a totally occluded right coronary artery (RCA) and severe stenoses in the left anterior descending (LAD) and left circumflex (LCx) arteries.



After explaining the various risks and benefits from bypass surgery vs PCI , he opted to undergo PCI and was not keen on any surgery. Successful PCI was done to the RCA chronic total occlusion using rotational atherectomy to the occluded portion as no balloon would expand in that portion due to heavy calcium. After rotablation stenting was done with two drug eluting stents in the RCA and one drug eluting stent in LAD and LCx. Without rotablation RCA angioplasty would not have been possible and patient would have required bypass operation. Overall excellent result was obtained and Mr SN is now back at work and free of angina.

In conclusion, with advanced techniques and technology PCI is now possible for patients with three vessel disease, calcified disease and in chronic total occlusions. Kauvery Hospitals , Chennai now has the technology and expertise to perform such complex coronary interventions very successfully with goo long term outcomes.



Rotablation technique - diamond tipped burr during ablation inside a calcified plaque



LAD - Pre treatment



LAD post treatment



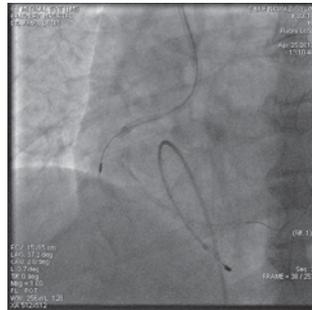
LCx post treatment



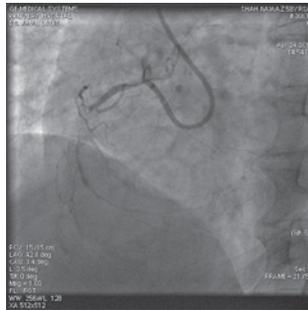
LCx pre treatment



RCA post treatment



Rotablation burr in the RCA



Totally occluded RCA

## Soft Tissue Sarcoma

Dr. Anis B

Soft tissue sarcomas are rare tumors of mesenchymal origin with more than 50 histological types contributing to only 1-2% of all solid tumors. They can occur at any site of the body with 45% occurring in extremities, 38% intrabdominally, 10% truncal and 5% in head and neck. The rarity of the tumor, heterogeneity in the anatomical site of occurrence and histopathological features along with the aggressive biological nature of the disease makes it one of the most difficult malignancies to manage.

**CASE REPORT:**

A 48 years old gentleman with post paralytic polio in left lower limb came with swelling in right thigh for 6 months with occasional pain, No difficulty in hip or knee movements, walks with crutches because of left leg residual paralysis, No metastatic symptoms.

On examination there was a large tumor of size 15 \*12 cms involving right anterior compartment of thigh, extending superiorly up to 5 cms from anterior superior iliac spine and inferiorly up to 6 cms from knee joint, posterior compartment and medial compartments were free, skin over the tumor stretched but not infiltrated, No distal neurovascular deficit, Hip and knee movements were of full range, No inguinal lymphadenopathy. MRI right lower limb showed Mixed intense soft tissue tumor of size 12\*10 cms confined to anterior compartment involving vastus lateralis, rectus femoris and part of vastus medialis . Abutting the periosteum in proximal femur but bone cortex was free, tumor was extending almost the entire vastus lateralis both distally and proximally, femoral vessels were free, knee joint and hip joints were free and no satellite lesions and no inguinal nodes. No lung metastasis in CT chest and Core biopsy was suggestive of malignant fibrous histiocytoma, grade III after IHC studies.

He was planned for wide local excision with primary closure. Elliptical incision made enclosing the core needle biopsy scar and part of the stretched skin over the tumor vertically along the anterior thigh. Skin flaps raised superficial to deep fascia , Femoral triangle opened and femoral vessels and nerve dissected along the full course up to adductor canal, Profunda femoris vessels identified ligated and divided, Femoral nerve branches supplying the vastus muscles divided and Sartorius muscle which was uninvolved by tumor was dissected along with its blood supply and preserved, the entire tumor with a cuff of normal muscle which included the vastus lateralis, rectus femoris, vastus intermedialis and part of vastus medialis removed giving a

gross margin of 2-3 cms three dimensionally all around the tumor along with periosteum of femur and lateral intermuscular septum for deeper margin were removed enbloc and marker clips applied at the margins for radiation field. Sartorius muscle Trans positioned to cover the femur and wound closed primarily.

Final histopathology was suggestive of 11\*8\*6.5 cms malignant fibrous histiocytoma, grade III, all resection margins were free . Staged as pT2bN0M0 – Stage III now receiving adjuvant External beam radiation therapy and then planned for further chemotherapy in view of high grade extremity tumor based on SMAC metanalysis.

**DISCUSSION:**

Anterior thigh soft tissue sarcoma corresponds to 30% of all soft tissue sarcomas and malignant fibrous histiocytoma being the commonest extremity sarcoma. Most often these patients are asymptomatic for a long period before these tumors attain a considerable size to produce symptoms like pain and often they are misdiagnosed as a hematoma or some benign swelling adding to the delay in diagnosis. In general any soft tissue mass that is symptomatic or enlarging, any new mass that persists >4 weeks, or any soft tissue mass that is >5 cm in diameter should be evaluated further with a imaging and core needle biopsy. MRI is the imaging of choice for extremity sarcomas and CT for retroperitoneal sarcomas. MRI gives information on the origin of tumor; extend of the tumor, underlying bone involvement, neurovascular involvement, adjacent joint involvement and for any satellite lesions. Metastatic workup includes CT chest to rule out lung metastasis. Core needle biopsy to be done along the line of surgical incision and gives information on grade and the histological subtype which are the most important prognostic factors for survival. If the core biopsy is inconclusive then excisional or incisional biopsy is required. For a small mass between 3 to 5 cm an excisional biopsy is appropriate if not then incisional biopsy has to be performed.

The biopsy should be carefully planned with incision oriented along the long axis of the extremity, and a minimal amount of skin flap should be raised superficial to the incision. Meticulous hemostasis is essential to prevent the dissemination of tumor cells. In patients with histological subtypes that are sensitive to chemotherapy like synovial sarcoma neoadjuvant chemotherapy can be considered in borderline resectable or Unresectable tumors. Surgery remains the primary-modality of treatment but has evolved through the years from the era of amputation to compartmental resection and now limb sparing surgery being the standard of care. Most patients receive multimodality treatment where wide local excision is performed to remove tumor with 2 cms gross margin and adjuvant radiation therapy given to treat microscopic tumor cells and further chemotherapy given for all high grade extremity tumors more than 5 cms to treat the micro metastasis and thereby decrease systemic failure and improve overall survival.

Limb sparing surgery is possible in more than 90% of patients unless there is gross cortical bone involvement or major neurovascular involvement or multi compartmental involvement or inappropriate biopsy site which could not be included in the surgical incision. Hence the importance of proper planning of the pre op biopsy site and ideally the biopsy to be done by the treating surgeon after imaging the local part. Regional node dissection done only when the nodes are enlarged and proven to be metastatic by cytological study. And when the nodes are positive it has a very poor prognosis.

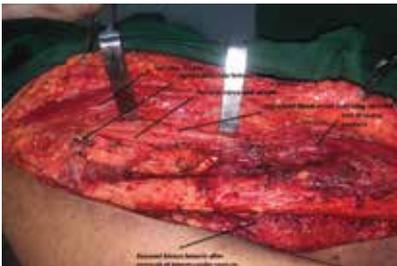
**CONCLUSION:**

Although soft tissue sarcomas are biologically aggressive tumors with a poor survival rate , when identified early with proper pre-operative work up and thorough planning from the biopsy site to the extent of surgery ,method of reconstruction and rehabilitation strategies most often limb sparing surgery can be done successfully with good functional outcome. Along with multi-disciplinary

management including radiation therapy, chemotherapy and strict follow up protocols especially in tertiary cancer care centres good survival outcomes can be attained most often.



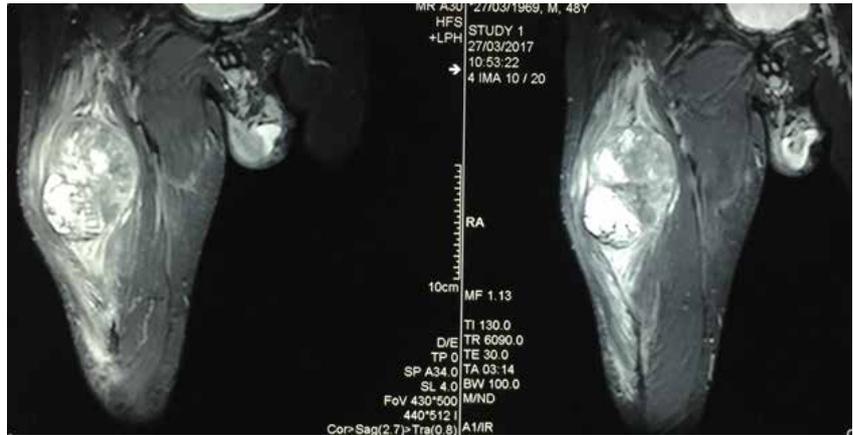
Femoral artery and vein dissected free along the entire course and profunda femoris vessels pointed.



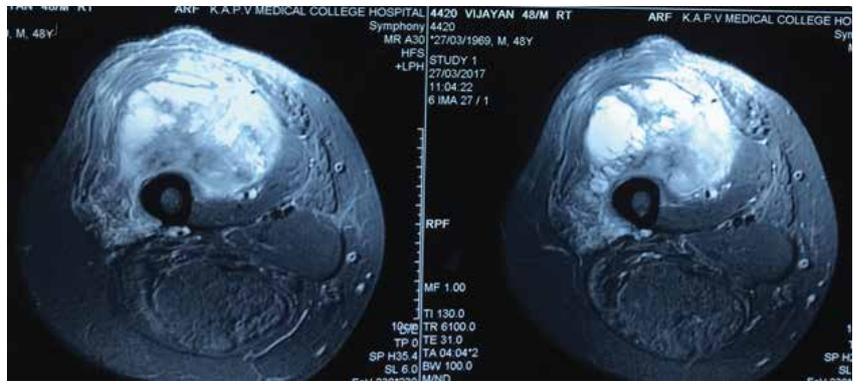
After removal of tumor with periosteum and lateral inter muscular septum.



Sartorius muscle Trans positioned to cover the femoral vessels and bone.



MRI T2 coronal view showing the tumor involving almost the entire anterior compartment.



MRI T2 Axial view showing the bulk of tumor involving vastus lateralis, rectus femoris and part of vastus medialis and abutting the periosteum but sparing Sartorius and femoral vessels.



Final specimen along with overlying skin

## Squash cytology as intraoperative diagnostic procedure.

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Squash cytology was first introduced in 1930. The soft nature of CNS tissue is best suited for squash cytology, which in fact is a hindrance for frozen section. Moreover, ice crystal artifacts may make morphological interpretation of frozen sectioned tissue difficult. Squash cytology can help neurosurgeon to deal with an unexpected lesion than that determined on clinical and imaging grounds. Role of squash cytology has increased with the advent of stereotactic biopsy which provide very tiny tissue.

### Case Study:

60yrs old female patient presented with right proptosis and orbital mass for 15yrs, with a blind eye. History of previous surgery 6years back in the same eye for which the biopsy report was unavailable. Patient now came with recurrence of tumor to Kauvery Hospital, Alwarpet, Chennai. MRI showed large right intra-conal tumor filling the right orbit, optic nerve, inseparable, lobulated in appearance. With these features, a clinic-radiological diagnosis of a Vascular tumor was considered.

Smears (Fig.1) were cellular showing sheets and whorls of oval to polygonal cells with abundant eosinophilic cytoplasm. Few cells also showed pseudonuclear inclusions and were traversed by thick capillaries in a haemorrhagic background. Which were features suggestive of a Meningothelial Meningioma.

The above intraoperative diagnosis was made within 15minutes. The histopathology by routine paraffin embedded section also confirmed the diagnosis of Meningothelial Meningioma.

### Squash Cytology:

Squash smears were made from fresh tissue, fixed in isopropyl alcohol and stained with Haematoxylin and eosin stain.

**Conclusion:**

Intra-operative squash cytology is a rapid and an inexpensive technique which can help the neurosurgeon with intra-operative decision making depending on the nature of the tumor. In this case a intra-operative diagnosis on squash cytology has saved the patient the morbidity of a more extensive surgery and also precludes the need for any adjuvant radiotherapy of chemotherapy.

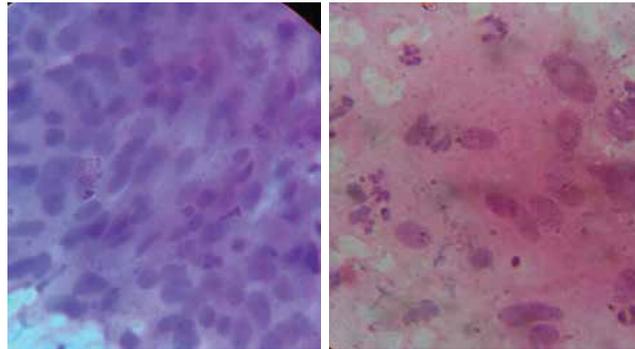


Fig.1  
A. Whorls of meningothelial cells B.Pseudonuclear inclusions(arrow)

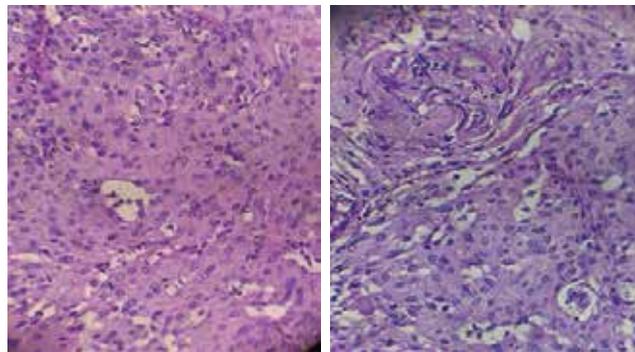
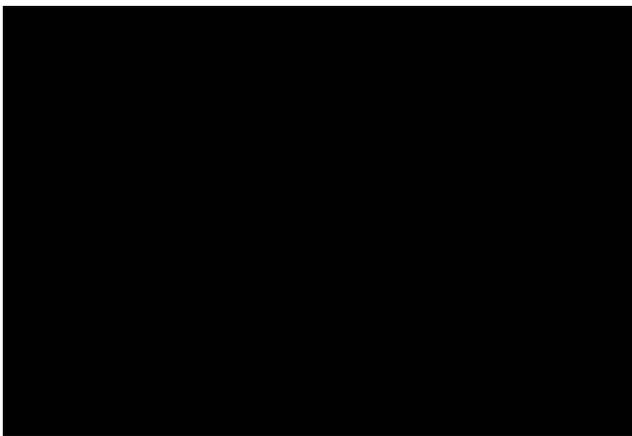


Fig.2  
Histopathology showing meningothelial cells in whorls and lobules.



A new round the clock pharmacy has started functioning at the Trichy Airport complex to aid the passengers, staff and the public on 02-06-2017(Friday). The pharmacy is to function along with the prevailing dispensary at the airport terminal.

Dr.S.Manivannan, Joint Managing Director,Kauvery Hospital and The Director of Trichy Airport,K.Gunasekaran inaugurated the pharmacy outlet.

The kauvery Hospital Pharmacy is located in front of the terminals near the ticket counters of all the major airlines.

# Know Your Numbers

You may even know if your cholesterol is high or if your blood sugar is on the low side. But do you know exactly what those levels are and what they mean to your health?

The Know Your Numbers campaign, which encourages people to learn their numbers related to cholesterol, blood pressure, blood sugar, weight and body mass index (BMI), was designed to raise awareness, increase detection of cardiovascular disease and diabetes and encourage people to make healthier lifestyle choices.

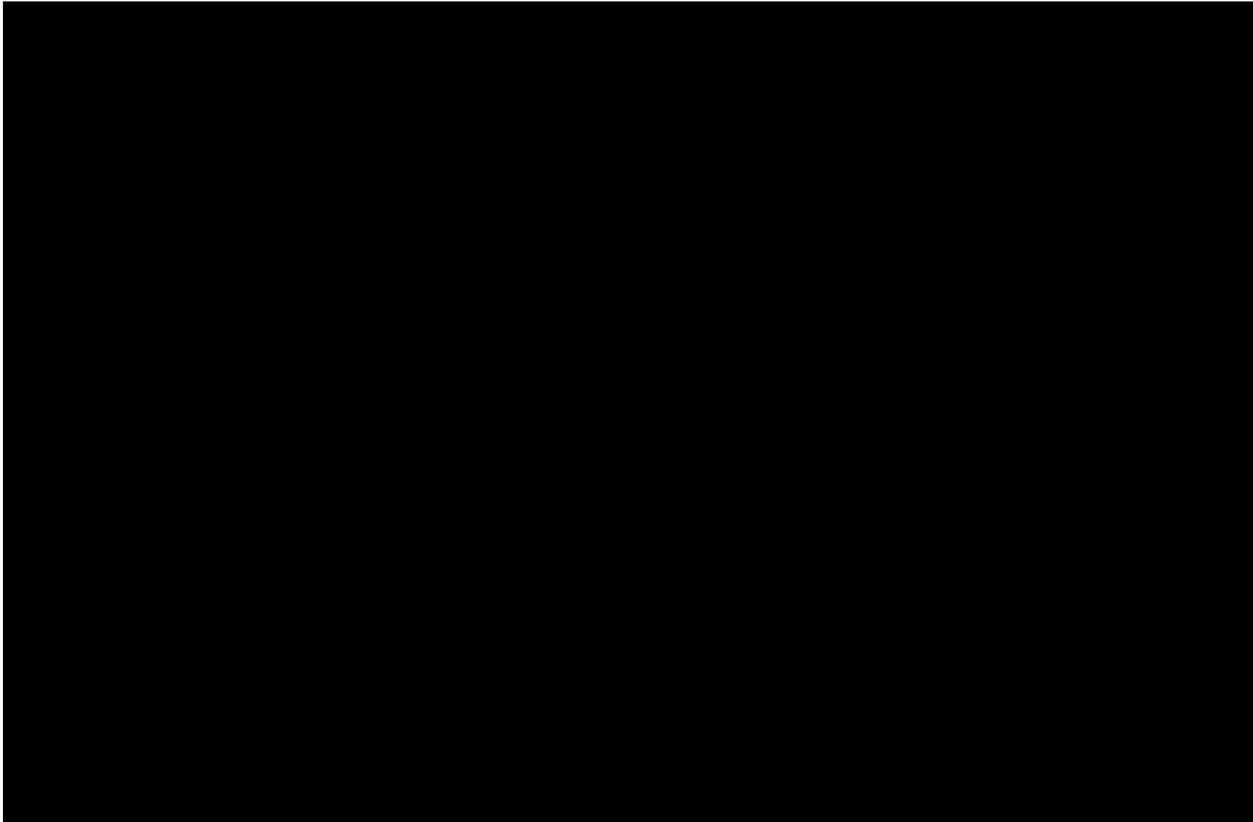
"It's important for people to know their numbers since they comprise a key snapshot of personal health,"  
So how exactly do these numbers come in handy?

These health metrics are important because they're risk factors for developing

diabetes, stroke and cardiovascular conditions. By knowing your numbers, you can compare them to healthy national numbers. This will help identify your personal risk factors for potential serious and chronic health conditions.

Many people do not understand the full meaning of their numbers that reflect one's current state of health, but knowledge is power. "By understanding these numbers and comparing them with national normal numbers, one has the power to begin making healthy lifestyle choices, such as exercising and eating a healthy diet,"

This campaign was done at Kauvery Heartcity, where many of the patients were benefited. and the awareness about the Numbers have been spread all along.





## HEALTHY *Rava Idly*

### Directions:

Instructions ( 1 cup =255 ml)

- firstly take a 4 tsp of oil
- add in mustard seeds, cumin seeds, urad dal, channa dal, curry leaves and hing. allow to splutter.
- then add ginger, chilli and saute till raw smell goes away.
- also add grated carrot, turmeric and saute for 2 minutes.
- now add rava and roast for 3 minutes. allow it to cool down.
- once completely cooled and add curd and mix well.
- add 1 - 1½ cup of water little by little (as required). form idli batter consistency.
- add salt to taste and mix well. keep aside for some time. (approx. 20 min).
- now add baking soda / eno fruit salt and mix till it turn frothy.
- after adding baking soda do not let it sit for more time. grease the plates with oil and place cashew in the mould.
- pour the batter into the idli moulds.
- and steam it for 10 mins
- allow it to rest for 5 mins then unmould. serve hot with any chutney of your choice.

### Ingredients

- 1 cup bombay rava / sooji / semolina
- 1 cup curd, sour
- 10 whole cashews
- 1 carrot, gratted
- ½ tsp baking soda / eno fruit salt
- 1 tsp mustard seeds
- ½ tsp urad dal
- 1 tsp cumin seeds / jeera
- ½ tsp channa dhal
- 4 tsp oil
- ½ tsp turmeric powder
- 10 curry leaves
- pinch hing / asafoetida
- salt to taste
- water, as required

# NEW DOCTORS

# ANY EVENTS

# ANY EVENTS

TRICHY



CHENNAI



KARAIKUDI



HOSUR