Bapuji Educational Association (R)

JJMMC Insperia

Official Quarterly Newsletter of J J M Medical College, Davangere
Issue-3/October-2022 Vol-21

Crowning Accomplishment

We are proud to share that the newly appointed Director for All India Institute of Medical Sciences, New Delhi Dr. M. Srinivas, is a Proud alumni of JJMMC, Davangere. A man of humble origins, Dr. Srinivas started in kannada medium school and later became an MBBS gold medallist. He did MS, General Surgery in our esteemed institute later to complete his MCH in Paediatric Surgery from AIIMS, New Delhi. He believes that the growth of an institute is a crucial factor in the success of a country's system.

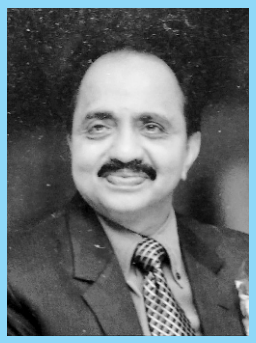
We heartily congratulate him for the huge step towards his future and also hope many of our alumni to accommodate greater posts in future.

Health Care Training of ASHA workers from SS Care Trust and JJMMC

Felicitation on the occasion of Doctors Day celebration by Academic Body

J. J. M. Medical College, Davangere.

NEWS LETTER COMMITTEE



From the desk of the Principal

Dear Students and Faculty,

"If you want to change the world, pick up your pen and write" said, Martin Luther once.

Our Quarterly newsletter, which chronicles the achievements of our students and faculty and promotes scientific writing, over the years has grown to have a personality of its own. Working with the magazine for so many years has made it a part of me to identify the emotion that each page portrays and look upon Insperia as an entity itself. I almost feel that it talks about our campus with the pride of a mother and treasures the achievements with pleasure every passing month and over years.

In its New Avatar JJMMC Insperia was released on the auspicious occasion of our beloved Co-Chairman, Shri S.S. Mallikarjun's birthday and as announced in the inaugural issue the 5555 blood donation drive is ongoing and fast paced to reach its target and free blood products dispensed has helped hundreds of needy patients already .

I'm happy to know that many of our faculty and students are actively involved in research, academics and also extra curricular activities. I take this opportunity to encourage more and more students and faculty to make sure that the glory of JJMMC always flies high.

Principal, JJMMC

The Chairman / The Principal
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Report on :

100 cases of TOTAL HIP ARTHTROPLASTY providing Painless Stable Mobile hip in patients with end stage hip diseases

Dr. T.M. Ravinath, Professor and Head, Department of Orthopaedics

Dr. Vijay Kumar Kulambi, Professor

Dr. Subodh Shetty, Professor

Dr. Navya Raj, Junior Resident.

Dr. Srikar Dabbara, Junior Resident

Introduction :

Total hip arthroplasty has improved hip function of patients suffering from hip disease or trauma with excellent clinical results and long - term survivorship.

Degenerative hip joint diseases are the major cause of pain and disability that results in considerable social and medical costs.

Undetermined abnormality of cartilage or subchondral bone, abnormally superimposed on grossly normal growth and development of hip leads to osteoarthritis sec, clinically the hyaline cartilage fibrillation and loss, ligament laxity, muscle weakness, synovial inflammation and perarticular changes in the bone characterise the disease.

For the long term pain relief and restoration of function for patients with diseases or damaged hips Total hip replacement is one of the most successful and cost effective surgical procedures and remains the treatment of choice

Main causes leading For the need of THR :

- Degenerative Hip disease (Osteoarthritis) secondary to
  - Avascular Necrosis
  - Non union Neck of Femur Fracture
  - Protrusio Acetabulum
- Rheumatoid Arthritis
- Aseptic loosening of Implant - for revision THR
- Implant failure

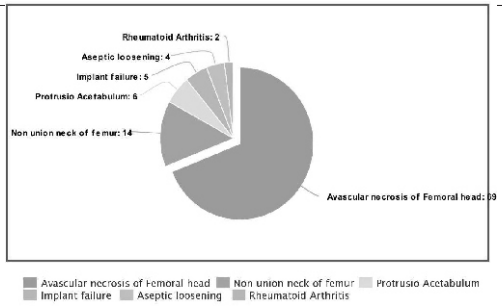
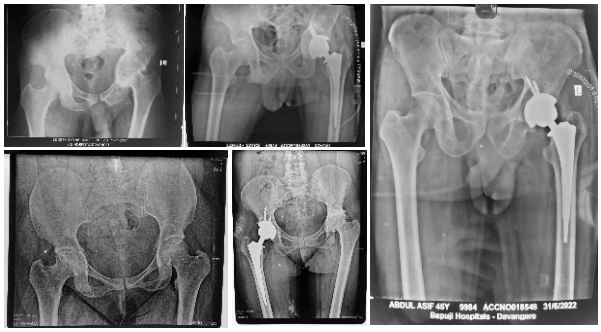


Fig 1: Causes for the need of THR

Images showing Pre and post operative X Ray findings in various patients



Discussion :

100 cases of Total hip arthtroplasty procedure has been succesfully done in Bapuji hospital. Total hip arthroplasty, or surgical replacement of the hip joint with an artificial prosthesis, is a reconstructive procedure that has improved the management of those diseases of the hip joint that have responded poorly to conventional medical therapy.

Post-operative patients are evaluated by functional outcome and radiological outcome through Modified Harris Hip Score and serial post-op X-rays correspondingly.

Conclusion :

- Total hip arthroplasty is one of the most reliable, reproducible, successful and cost-effective procedures.
- It's considered one of the major advances in the treatment of orthopedic diseases, one of the most performed surgeries.
- It gives rapid recovery and return to most activities of daily living.
- Aim of surgery being painless mobile stable hip has been achieved

Anaesthetic management of gastric pull up surgery

Dr. Uma B.R. Professor, Dept of Anaesthesiology
Dr. Akshatha. D - Senior Resident
Dr. Haritha A. P - Post graduate
Dr. Devaraj Koppad - Post graduate

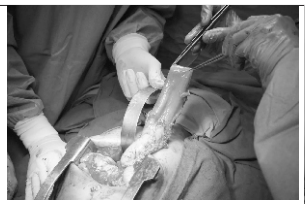
A 3year old male child, born with trachea-oesophageal fistula (TEF) type C had undergone repair for the same at 8 days of life. As the length of oesophagus was not adequate for anastomosis, an oesophagostomy with feeding gastrostomy was done at 8 days of life and a definitive repair (gastric pull up) was planned at a later stage.

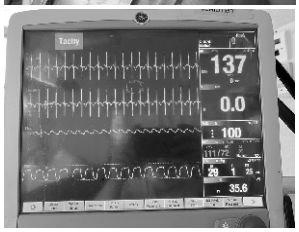
The anaesthesia team had many challenges ahead of them. In the pre-operative period, the child was malnourished and unable to withstand the stress of surgery. A team of paediatricians attended to the child, his nutritional status was improved over a period of 2 months and a weight of 10 kg was achieved at the time of surgery. The child had a small Atrial Septal Defect and respiratory infection. He was stabilized in the pre - operative period along with arrangement of AB negative blood group.

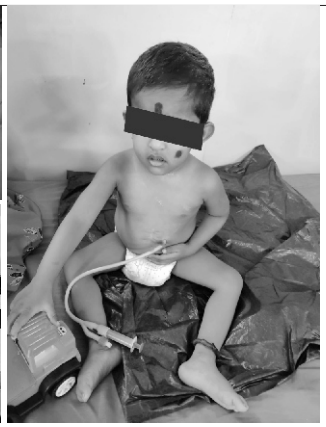
Child was premedicated with Glycopyrrolate 0.1mg, Midazolam 0.3mg and morphine 0.5mg, induced with sevoflurane, relaxed with Succinyl choline 20mg, intubated with 4 sized uncuffed endotracheal tube, and maintained on O2 + N2O + intermittent atracurium + sevoflurane + IPPV.

Central venous catheter (femoral line) was inserted. During intra- operative period, blood loss was assessed (200ml) and blood transfusion was started (100ml prbc + 175ml FFP). While the surgeons mobilized the stomach, pulled it up into the thorax , there were chances of tracheal compression, endotracheal tube dislodgement, aortic rupture, cardiac dysarrythmias and cardiac arrest. So all the necessary monitoring like pulse oximetry, NIBP, ECG, EtCO2 , temperature monitoring, urine output was done to identify any of these at the earliest. Effective pain management in the form of paediatric epidural catheter insertion demanded precision of our technical skills.

In the post - operative period, the child was put on elective mechanical ventilation in pressure controlled mode.







Due care was taken to avoid ventilator related complications like pneumothorax, ventilator associated pneumonia. Post operatively, PRBC transfusion was done in view of low hemoglobin level. Postoperative analgesia was maintained with intermittent epidural boluses.

After the surgery which lasted for 6 long hours of duration, 48 hours of post - operative ventilation, the child was stabilized, weaned from the ventilator and extubated.

It is for the first time that this kind of a surgery is conducted in Bapuji Child Heath Institute (BCHI). The surgery has been successful and the child has completely recovered.

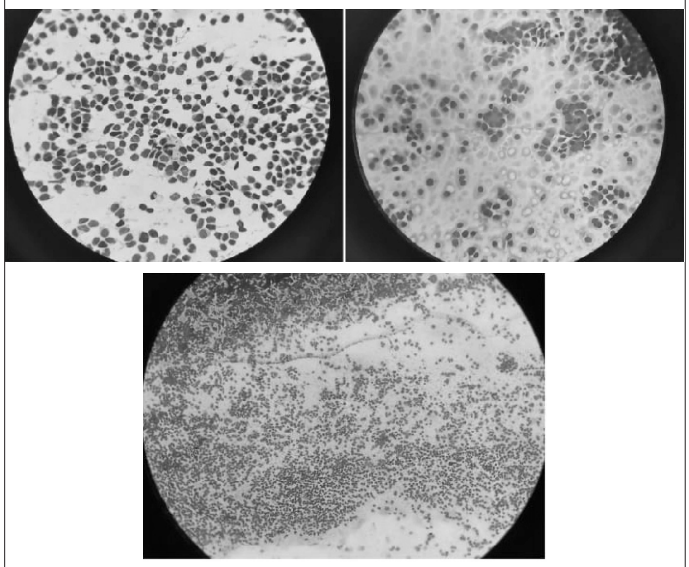
Perioperative management of a case of paediatric neuroblastoma

Dr. Priyadarshini M. Bentur, Dr. Ravishankar R.B,
Dr. Aditya Mungamuri
1 Professor, 2 Post graduate, Dept. of
Anaesthesiology, JJM Medical College

Introduction

Neuroblastoma is a malignant tumor derived from neural crest cells that normally form the adrenal medulla and the sympathetic nervous system. First described by Rudolf Virchow in 1864 as an abdominal "glioma," neuroblastomas account for more than 11% of cancer-related deaths in children. It is the most common extracranial, solid, malignancy of childhood, accounting for 5 to 8% incidence. They are malignant catecholamine-secreting tumours of children. It is an embryonal tumor of the sympathetic nervous system and a heterogeneous disease, characterized by variable clinical and biological behavior.

It can originate anywhere along the sympathetic chain such as a cervical, thoracic, retroperitoneal, or pelvic mass, affecting newborns, infants, or children; it can manifest as a small asymptomatic mass or as a large tumor with a major vascular encasement, spinal or bone marrow involvement. Prognosis ranges from spontaneous regression without treatment to aggressive, disseminated disease, refractory to multi-modal therapy including chemotherapy, surgery, and radiation. The result of this variability is a complex system of staging and pre-treatment risk stratification that tailors the intensity of treatment according to the patient's stage, age and to the disease histology and biology. Anesthesia takes an integral part into this articulated process, in a cross-sectional fashion, from diagnosis to the challenges of treatment, providing sedation and pain control, general anesthesia for surgery and invasive procedures, intensive and palliative care.



Case Report

A 4-year old girl weighing 11.9kg presented with swelling over Left lumbar region (3x3cm) since 15 days. Patient was also newly diagnosed with Systemic Hypertension but not on any treatment. Parents did not give any history of diarrhea, vomiting or pain abdomen. Patient did not have any other co-morbidities and no history of diagnosed congenital heart disease was informed by the parents. The child's birth history was uneventful and immunization and developmental were age appropriate.

On examination, child was tachycardiac (PR 114 bpm) and hypertensive with BP - 116/74mmHg and other vitals being normal. **Systemic Examination revealed normal respiratory, cardiovascular and central nervous systems.** Per Abdomen signigicant findings were a palpable mass over Left iliac region measuring 4x4cm, firm in consistency.

Lab Investigations: - Hb 8.2g/dL to 11.8g/dL after PRBC transfusion, HCT 26.4%, TC 10090, Platelets 7.29L, BG B+ve, Urea 14, S. Cr 0.2, PT T-14.2; C-11.8, INR 1.2, APTT T-37.3; C-29.8, Na 139, K 4.8, Cl 107, LFT WNL, Urine VMA 0.42mg/24hr, RBS 101mg/dL.

FNAC - s/o Blue cell tumor likely Left Suprarenal neuroblastoma

CECT Abdomen - f/s/o Large Neuroblastoma (8.9x5.5cm); Prominent left extrarenal pelvis notch

USG Abd/Pelvis - Neuroblastoma of Left suprarenal gland (10x8cm) and sequel

2D ECHO - Small secundum ASD (4mm) with Left to Right shunt; Mild PAH; Mild AR, Trivial MR; LVEF 75%; Minimum Bilateral Pleural effusion; IVC normal

Preoperative Management :

Patient was posted for elective left adrenelectomy. It was decided to optimize the child preoperatively before taking up for OT. Pediatric endocrinologist was consulted i/v/o raised blood pressure and advice was followed. Hypertension was controlled preoperatively with the combined use of Calcium channel blocker like Amlodipine, ?-blocker like Propranolol and ? blocker like Prazosin. Anemia was corrected following PRBC transfusion. Pediatric cardiologist opinion was also sought i/v/o ASD noted on 2D ECHO and fitness was taken.

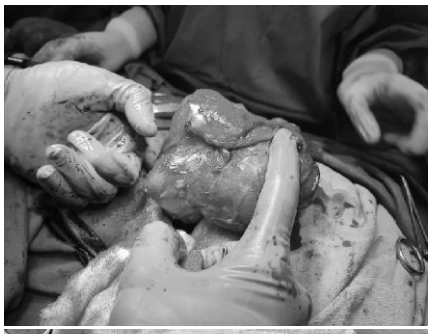
On the day of surgery, calculated sets of infusion were readied of Nitroglycerine and Dexmeditomidine for lowering blood pressure. Infusions of inotropes viz. Norepinephrine and Dopamine were kept on standby.

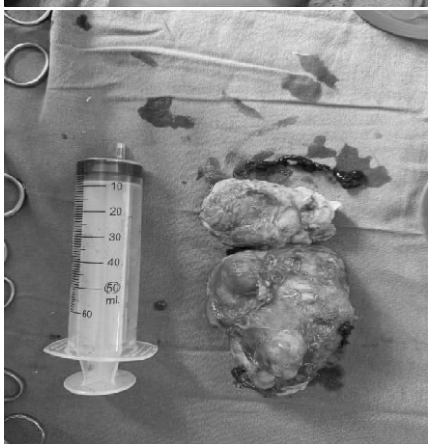
Intraoperative Course

Under General Anaesthesia, child was intuited under Direct laryngoscopy.Patient was maintained using Oxygen, Nitrous oxide, Isoflurane, intermittent Atracurium, Fentanyl and IPPV.

IV Fluids were administered in accordance to maintenance and volume loss. 180mL PRBC was also transfused i/v/o intra-operative blood loss. Blood pressure was constantly monitored and maintained using Inj. Nitroglycerine infusion IV at the rate of 1mcg/min.

Post surgery, patient was put in left lateral position and under aseptic precautions, 19G Tuohy needle was passed in L4-L5 intervertebral space. Epidural space was found at 1cm and was confirmed by Loss of Resistance technique. Epidural catheter was passed and fixed at 6cm. Inj. Ropivacaine 0.2% test dose was given after negative aspiration. Patient vitals were monitored and stable. Patient was put back in supine position, respiratory efforts were noted, and reversal was given. Patient was extubated, recovery was smooth and complete.





Post Operative Course

Patient was shifted to PICU for further monitoring, Inj. NTG infusion was tapered and stopped, the child was restarted on oral antihypertensives post breaking Nil Per Oral status. Patient was kept on NRBM mask with 10L/min O2 flows for a period of 6hrs. Pain management was by epidural topups. Epidural catheter was removed after 48hrs, tip was intact.

Patient vitals were monitored for a period of 72hrs post surgery, vitals were stable. Patient was discharged and sent home.

Discussion

Hypertension is a well-described finding in children with tumors of the sympathetic nervous system. It may be attributed to the vasoconstrictor action of catecholamines secreted by the tumor or the stimulation of the renin---angiotensin---aldosterone system secondary to compression of the renal artery or the raised intraabdominal pressure. Although reported, intraoperative hypertension among pediatric patients with neuroblastoma is much less frequent than preoperative hypertension. Treatment of neuroblastoma related hypertension has included volatile anesthetics, phentolamine, nitroglycerin, propranolol, prostaglandin EI, and alpha-methyl tyrosine. Marked preoperative hypertension should be controlled prior to induction of anesthesia and surgery.

Intraoperative hypotension is another challenge we must be aware of among patients undergoing tumor resection and can be attributed to intravascular volume contraction, surgical losses, anesthetic depth, and vasodilation associated with a decrease in catecholamine levels.

Conclusion

Despite the constant progress and technological advances in the therapy of neuroblastoma, surgery and anesthesia remain milestones for the successful treatment of this challenging disease. Knowledge of the critical points and structure of anesthesia for these complex procedures is helpful to all the health care professionals involved in cancer care and should be taken into consideration for the aim of improving quality of care.

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Plastination - an advancement in long-time preservation of cadaver and specimens

Dr. Premchand S.A., Associate Professor, Department of Anatomy.

Plastination is also called forced polymer impregnation. It is an ideal method for long-term preservation of tissues, whole bodies or body parts and can be used for anatomical teaching. Wet specimens can only be used for a few years but specimens prepared with care prior to plastination have their future use in teaching over several decades. Plastinated specimens have a long shelf life.

Plastination Technique was invented and patented by Dr. Gunther Von Hagens in 1977 in the city of Heidelberg, Germany. With this revolutionary technique anatomical specimens can be preserved permanently in their original state.

Dr. Gunther Von Hagens, inventor of Plastination and founder of the BODY WORLDS exhibitions. Plastination Technique is possible by exchanging the water and soluble fat of the tissue with polymers. The cell structure and the natural surface are not changed by Plastination, they maintain their original size and shape down to a microscopic level.

Steps involved in Plastination are,

- **Embalming And Anatomical Dissection**

The first step of the process involves halting decay by pumping formalin into the body through the arteries. Formalin kills all bacteria and chemically stops the decay of tissue. Using dissection tools, the skin, fatty and connective tissues are removed in order to prepare the individual anatomical structures.

The process of plastination is based on two exchange processes:

- **Removal Of Body Fat And Water**

In the first step, the body water and soluble fats are dissolved from the body by placing it into a solvent bath (e.g., an acetone bath).

- **Forced Impregnation**

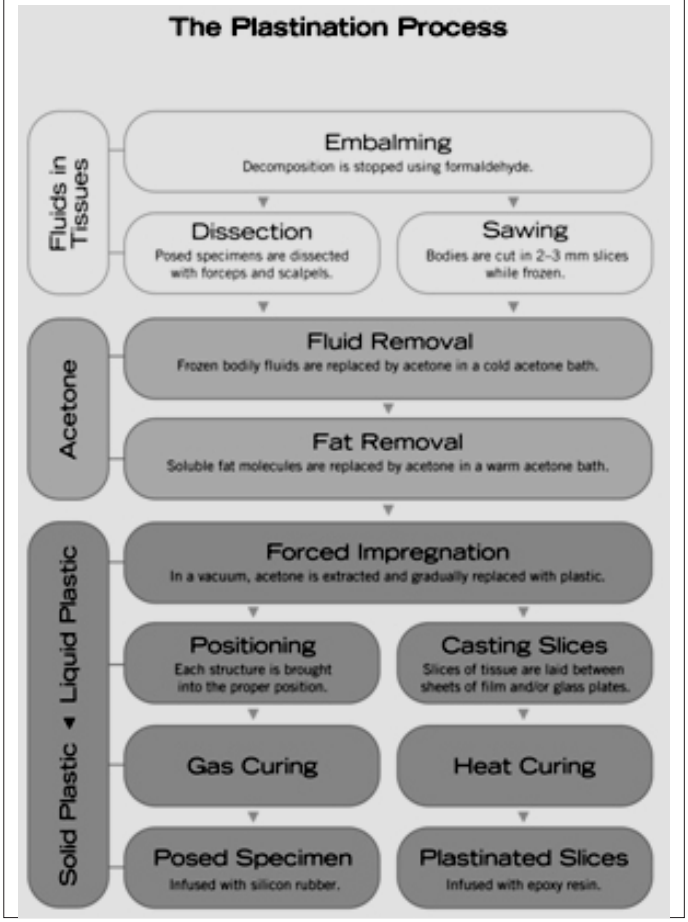
This second exchange process is the central step in Plastination. During forced impregnation a reactive polymer, e.g., silicone rubber, replaces the acetone. To achieve this, the specimen is immersed in a polymer solution and placed in vacuum chamber. The vacuum removes the acetone from the specimen and helps the polymer to penetrate every last cell.

- **Positioning**

After vacuum impregnation, the body is positioned as desired. Every single anatomical structure is properly aligned and fixed with the help of wires, needles, clamps, and foam blocks.

- **Curing (Hardening)**

In the final step, the specimen is hardened. Depending on the polymer used, this is done with gas, light or heat.



In 1977, Gunther von Hagens invented the plastination process at the Anatomical Institute of Heidelberg University, and he has since continued to develop and refine it. The first whole-body plastinate was created in 1992. The development of the plastination process has always been linked to the development of suitable polymers because the mechanical and optical properties of the polymers determine the characteristics of the plastinated specimens.

Plastination technique has several advantages like making cadaver easy to handle, easy storage, odorless presentation and presents more anatomical details.

Botulinum Toxin A (Botox) In Hemifacial Spasm

Dr. Shivayogi R Kusagur, Professor and Oculoplasty consultant

Dr. Sanjana S, Post Graduate, Dept. of Ophthalmology

Introduction

Hemi facial spasm is a disorder characterized by paroxysmal, involuntary twitching of facial muscles of one side of the face innervated by the ipsilateral facial nerve (seventh cranial nerve).The disorder is almost always unilateral except in some rare cases of severe hemi facial spasm (less than 5%), during which one can see the bilateral involvement of facial muscles.[1]

Estimated prevalence is around 10 in 100,000 2. The condition usually begins as spasms of lower eyelid on one side of the face, which eventually spreads to upper eyelid and other muscles in ipsilateral face, often associated with elevation of ipsilateral eyebrow referred to as the "other Babinski sign"2.The estimated prevalence is 14.5 and 7.4 per 100,000 in women and men, respectively. [2]

Hemi facial spasm is classi?ed as primary (79%) or secondary to facial nerve damage (21%) 3. The former is attributed to the compression of the facial nerve at the root exit zone in the brainstem, usually by an ectatic or aberrant blood vessel 3. Instead, the latter has been associated with a number of conditions, including cerebellopontine angle tumors, acoustic neuroma or meningioma, epidermoid, arachnoid cyst, lipoma, arteriovenous malformations; brainstem, infections, structural abnormalities of the posterior cranial fossa (Paget's disease, Chiari malformation); parotid tumors; and Bell's palsy. [3]

Botulinum toxin, also called "miracle poison," is one of the most poisonous biological substances known 4It is a neurotoxin produced by the bacterium Clostridium botulinum, an anaerobic, gram-positive, spore-forming rod commonly found on plants, in soil, water and the intestinal tracts of animals.

Mechanism of Action

Botulinum toxins act at four different sites in the body: The neuromuscular junction, autonomic ganglia, postganglionic parasympathetic nerve endings and postganglionic sympathetic nerve endings that release acetylcholine.[4]

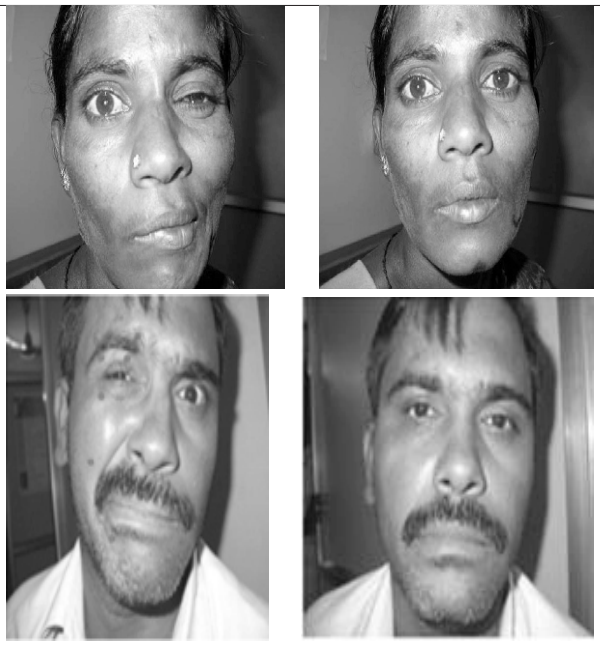
When the motor neuron action potential depolarises the axon terminal, acetylcholine is released from the cytosol into the synaptic cleft. This acetylcholine release is performed by a transport protein chain, the soluble N-ethylmaleimide-sensitive factor attachment protein receptor (SNARE) complex. After internalisation, the light chain of the botulinum neurotoxin binds with high specificity to the SNARE protein complex. The light chain's proteolytic cleavage of the SNARE protein complex prevents the docking of the acetylcholine vesicle on the inner surface of the cellular membrane and results in blockade of vesicle fusion.

Formulations

Two preparations of botulinum toxin A exist: Dysport® and Botox®. Doses are quoted in mouse units (which is the amount of toxin that kills 50% of a group of 18-20 g female Swiss-Webster mice), implying some standardization. Botox® is a sterile lyophilized form of botulinum toxin type A. It is produced from a culture of the Hall strain of C. botulinum and purified by a series of acid precipitations to a crystalline complex containing the toxin and other proteins. Each vial of Botox® contains 100 Units (U) of Clostridium botulinum type A neurotoxin complex, 0.5 milligrams of Albumin (Human), and 0.9 milligrams of sodium chloride in a sterile, vacuum-dried form without a preservative.[4]

Reconstitutions and Storage

Vial- 100 U of Clostridium botulinum A , 0.5mg Human Albumin and 0.9mg of NaCl. Diluent- 0.9% NaCl (preserved). Should be used within 4 hours after reconstitution.Can be used up to 4-6 weeks post reconstitution.



Guidelines of Treatment

Botulinum toxin has to be diluted to a minimal concentration in order to lower its spreading. It is injected via a 30-gauge needle. The muscles involved in hemi facial spasminclude: orbicularis oculi, corrugator supercilii, zygomaticus major, zygomaticus minor, levator labii superioris alaeque nasi, risorius, orbicularis oris, mentalis, depressor anguli oris, and platysma .

Currently, total doses recommended for hemi facial spasm for each session should range accordingly: 10-34 U for Onabotulinum toxin A, 53-160 U for Abobotulinum toxin A, and 1250-9000U for Rimabotulinum toxin B.

Action starts between 1-3 days. Peak effect between 4-7 days. Nerve sprouts-2 months. Effect lasts up to 3-4 months

Followup Monitoring

The weakness induced by injection with botulinum toxin A usually lasts about three months. Response after the injections should be assessed both by subjective and by objective measures.4Among the available clinical scales, the Hemifacial Spasm Grading Scale (HSGS) is regarded as an objective, quick and reliable tool for the assessment of HEMI FACIAL SPASM, based upon motor signs which are useful for monitoring Botulinum toxin (Botulinum toxin) treatment efficacy over time.

Adverse Effects

There can be mild injection site pain and local edema, erythema, transient numbness; headache.Side effects of Botulinum toxin for hemi facial spasminclude ptosis (7.8-36%), double vision (1.6%), blurredvision (2.5%), dry eyes/exposure keratitis (2.5%), dysphagia (5.5%), facial droop (3.5-5.5%), eye lid swelling/ecchymosis (3.8%), nausea (2.5%), and conjunctival redness5.

Contraindications To Botulinum Toxin Injection

Patients afflicted with a preexisting motor neuron disease, myasthenia gravis, Eaton-Lambert syndrome, neuropathies, psychological unstability, history of reaction to toxin or albumin, pregnancy and lactating females, and infection at the injection site.[4]

Discussion

Savino et al. published one of the earliest case series in 15 patients who experienced relief of hemi facial spasm after Botolinum toxin injections. In a series of patients with Blepharospasm (n=70),HEMI FACIAL SPASM(n=13), Cervical Dystonia(n=195), handdystonia(n=22), and oromandibulardystonia (n=45) who underwent Botulinium toxin injections, 94%, 92%, 90%, 77%, and 73% experienced relief of their symptoms, respectively. In another series, 98% of 130 patients with Hemi Facial spasm patients experienced relief of symptoms after Botulinum toxin injection.[5]

Conclusion

The use of botulinum toxins has revolutionised the treatment of various ophthalmic spastic disorders, facial dystonias and periocular wrinkles. A precise knowledge and understanding of the functional anatomy of the mimetic muscles is absolutely necessary to correctly use botulinum toxins in clinical practice.

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Extended TEP of umbilical hernia first of it's kind in our institution

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Dr Yashodhara N, PG
Department of general surgery,

Introduction:-

The umbilicus is formed by the umbilical ring of the linea alba. Intra-abdominally, the round ligament (ligamentum teres) and paraumbilical veins join into the umbilicus superiorly and the median umbilical ligament (obliterated urachus) enters inferiorly. Umbilical hernias in infants are congenital and are common. They close spontaneously in most cases by the age of 2 years.

Umbilical hernias in adults are largely acquired. These hernias are more common in women and in patients with conditions that result in increased intra-abdominal pressure, such as pregnancy, obesity, ascites, or chronic abdominal distention. Umbilical hernia is more common in those who have only a single midline aponeurotic decussation compared with the normal decussation of fibers from all three lateral abdominal muscles.

There has been a surge of innovative procedures in the field of abdominal wall hernias. Conventional and popular surgeries for umbilical hernias are open onlay mesh hernioplasty, open retromuscular mesh hernioplasty (Rives-Stoppa procedure) and laparoscopic intraperitoneal mesh hernioplasty(IPOM and IPOM plus) which are routinely done elsewhere and also in our institution.

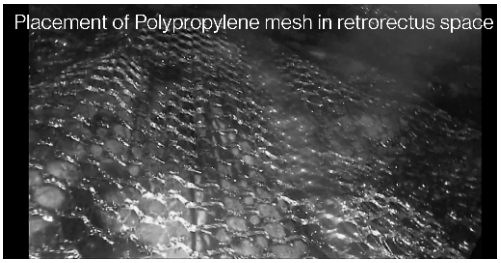
Extended totally extra-peritoneal repair (eTEP) is a novel technique that was first introduced by Jorge Daes in 2012.

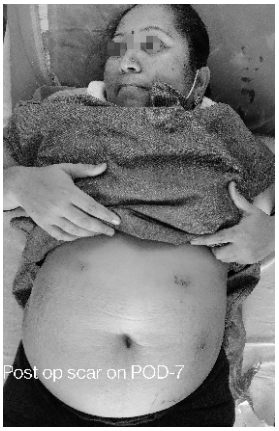
With the advent of eTEP, the cost of surgery is brought down due to use of regular prolenemesh, as composite mesh with anti-adhesion barrier is not needed which were used routinely in IPOM and IPOM plus. Also It has got lesser recurrence, less post operative pain, fewer issues of mesh fixation whereas tackers used in IPOM and IPOM plus for mesh fixation. However, the technique has a steep learning curve and technically demanding as the operative area is smaller and anatomy is more difficult to grasp.

Herein we report our successful eTEP in 2 cases of umbilical hernia,

Two Patients who had umbilical hernia with defect size of 7mm and 2cm respectively, underwent eTEP. Second patient had diverication of recti,for which diverication was approximated with V-lock sutures. For both of them, 15 x 15cm polypropylene mesh was used and average operative time was around 120mins. Post operative period was uneventful with pain score of 3/10.

Intra-op images of eTEP





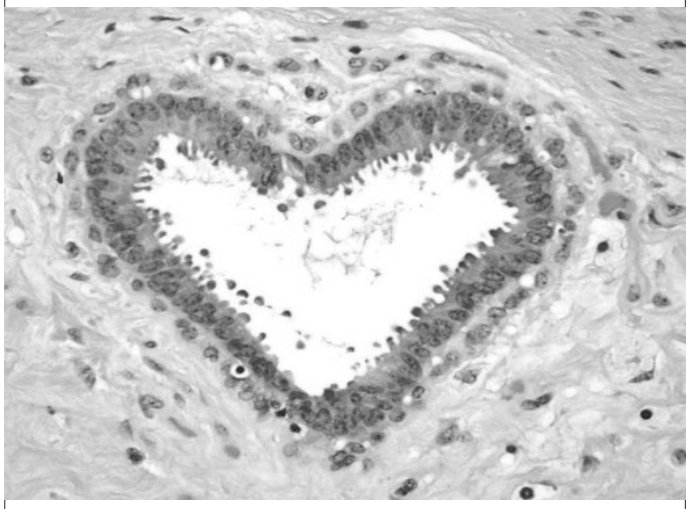
The NOBLE Prize in Physiology or Medicine 2022 - Svante Pääbo - for his discoveries concerning the genomes of extinct hominins and human evolution

Humanity has always been intrigued by its origins. Where do we come from, and how are we related to those who came before us? What makes us, Homo sapiens, different from other hominins?

Svante Pääbo is a Swedish geneticist, through his pioneering research, accomplished something seemingly impossible: sequencing the genome of the Neanderthal, an extinct relative of present-day humans. He also made the sensational discovery of a previously unknown hominin, Denisova. Importantly, Pääbo also found that gene transfer had occurred from these now extinct hominins to Homo sapiens following the migration out of Africa around 70,000 years ago. This ancient flow of genes to present-day humans has physiological relevance today, for example affecting how our immune system reacts to infections.

Pääbo's seminal research gave rise to an entirely new scientific discipline; *paleogenomics.* By revealing genetic differences that distinguish all living humans from extinct hominins, his discoveries provide the basis for exploring what makes us uniquely human.

MEDI-INSTA

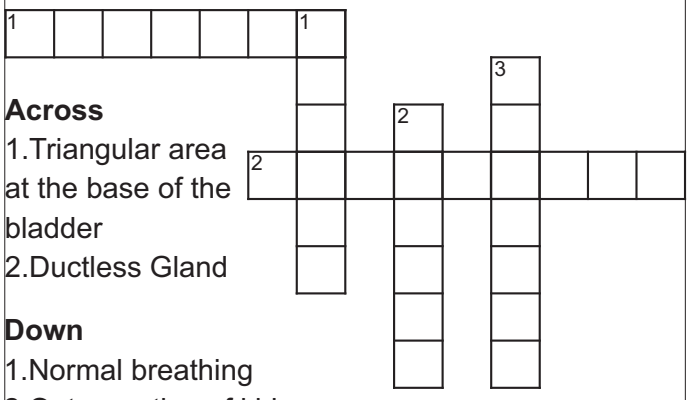


Heart in benign breast firoadenoma.

- Benign biphasic tumor composed of a proliferation of both glandular epithelial and stromal components of the terminal duct lobular unit.
- Most common breast tumor in adolescent and young women
- Benign biphasic tumor comprised of glandular epithelium and specialized interlobular stroma of the terminal ductal lobular unit
- Can show a spectrum of histologic appearances; generally uniform in stromal cellularity and distribution of glandular and stromal elements within a given lesion (an important distinction from phyllodes tumor)
- Fibroadenomas with hypercellular stroma and prominent intracanalicular pattern can show morphologic overlap with benign phyllodes tumors, especially in needle biopsy specimens

#Pathology#PathArt#Science#Art

MENTAL FLOSS



Across

1.Triangular area at the base of the bladder

2.Ductless Gland

Down

1.Normal breathing

2.Outer portion of kidney

3.Multiple tiny haemorrhages under skin

DEPARTMENT OF ANATOMY

Achievements

1. Oral paper presentation at 22nd KCACON 2022, State Level Anatomy Conference held at Hassan Institute of Medical Sciences, Hassan on 16, 17 & 18 September 2022.

Presenting Author	Title
Dr. Raghavendra V.P. Professor	• Variations in the superior and inferior ulnar collateral artery in its origin, termination & branching pattern in arm, forearm and palm • Bilateral unusual formation of dorsalis pedis artery and its branching pattern in same individual

2. Dr. Raghavendra V. P., Professor of Anatomy chaired a scientific session on "Temporal lobe Anatomy: Gateway to Epilepsy", by Dr. Shabari Girishan, Consultant Neurosurgeon, Ramaiah Medical College, in Pre-Conference CME held on 16th September 2022, at 22nd KCACON 2022 at Hassan Institute of Medical Sciences, Hassan.
3. Late Dr. B. Nanjundappa, Former Professor of Anatomy, JJMMC, was awarded with SHUSRUTHA GOLD MEDAL AWARD (Posthumously) for the excellence in Research, Teaching, Guidance and Services rendered in the field of Anatomy for the year 2022 by Karnataka Chapter of Anatomists on 17th September 2022 at 22nd KCACON 2022, State Level Anatomy Conference held at Hassan Institute of Medical Sciences, Hassan.

DEPARTMENT OF COMMUNITY MEDICINE

1. National Conference on Technology Breakthrough in Health care was organized by Department of Community Medicine, JJM Medical College on 11th and 12th June 2022. The two day conference included workshops for the undergraduate students and various sessions by esteemed speakers including Public Health in Digital India, Artificial intelligence in NTEP, AI for empowering health workers and patients, Accesses to care-Million to Billion, Recent advances in Robotic surgery in oncology and interventional pulmonology - A new Horizon. The conference was attended by delegates across the country.
2. School health check up was carried out from Urban health Training centre, Department of Community Medicine, JJM Medical College on 23rd, 24th and 25th August 2022 at SSPGUHS Azadnagar.

230 Students were screened in the school health check up. The most common health issues of the students based on their symptoms were refractive errors and Anemia. Among 230 students 59students were referred to various departments. (OBG-5, Opthal- 45, Pediatrics-5, ENT- 4)

3. Non communicable diseases screening among Government school teachers was carried out at SSPGUHS, Azadnagar, Davangere by Department of Community Medicine on 9th September 2022. Total of 22 teachers were screened in the screening programme.

4. School health check up was carried out from Urban health Training centre, Department of Community Medicine, JJM Medical College on 7th and 8th September 2022 at MMMGHS K.R Road Davangere. 105 Students were screened in the school health check up. The most common health issues of the students based on their symptoms were refractive errors and Anemia. Among 105 students 36 students were referred to various departments. (OBG-6, Opthal- 19, Pediatrics-10, skin- 1).

   National nutrition month was celebrated in MMMGHS school. Essay competition was organised on 19th September on the topic "Food and Health" for high school students. 35 students participated in the competition and 5students secured the prizes.

   Nutrition health Education programme was organised at MMMGHS school on 22nd September from Department of Community Medicine, JJM Medical College Davangere. The key notes of the programme was delivered by Dr. Anurupa MS (Professor and Head of the Department) which was presided by Burden of nutrition related problems in adolescents by Dr. Shalini H and information related to Nutritious food was given by Dr. Drishti and Dr. Dakshina.

5. A school health check up was carried out at Patel Veerappa School, Kakkargolla, RHTC field practice area, 15/09/2022 TO 17/09/2022; 278 students were screened.

6. National nutrition week was observed on 23rd September 2022 for school children in Rural Health Training Centre Kakkaragolla. An Interactive session with children regarding health and nutrition was conducted. The activity was coordinated by Dr. Navinkumar Angadi (Associate professor)

7. Anganwadi health checkups were conducted at Kakkargolla & Kodihalli RHTC field practice area 21/09/2022 TO 25/09/2022. Total No. of Children Screened:87

8. Family adoption activities

Family adoption activities were conducted by Department of Community medicine. 1st year Medical students are allotted five families and were oriented on data collection as socio demographic details and anthropometric assessment. They will then follow up with the families health conditions on repeated visits .

DEPARTMENT OF PHARMACOLOGY

Publications

1. Sushma HK, Renuka BG, Apoorva BM, Srinivas LD, Narendranath S, Shashikala GH. Study to evaluate compliance and adherence to lifestyle modifications in diabetic/ hypertensive patients, during lockdown period due to COVID -19 in sample population of Davangere. Asian journal of pharmaceutical and clinical research. 2022;12(10)

2. Shruti KS, Narendranath S, Sudarshan AY, Santosh Kumar M, Shashikala GH, Dhanyakumar G. A prospective study of Fluoxetine on primary hemostasis of patients having major depressive disorder. Asian journal of pharmaceutical and clinical research. 2022; 15(10)

Keys to Mental floss

Across	Down
1. TRIGONE	1. EUPNEA
2. ENDOCRINE	2. CORTEX
	3. PURPURA

DEPARTMENT OF OBSTETRICS & GYNAECOLOGY

KSOGA stands as an epitome of knowledge and has built throughout Karnataka and India bringing all obstetrics and gynaecology fraternity together. KSOGA has not only done great work in academic platform but also in various social platforms.

KSOGA 2022 was an absolutely wonderful experience for post graduates. Across the three days of multiple symposiums, debates, scientific talks about the latest guidelines and developments and exciting hands on drills, it would be wrong to say out knowledge and interest depended in the subject, but the fun and games did not lag too far behind, as the hosts managed to keep our sprits high inside and outside the classrooms with their colourful and captivating performance. All in all, it was a great experience for a state conference for all.

Following is the list of staff and postgraduate students who made presentation at KSOGA -2022, Hubli			
Sl. No.	**Name of the Presenter**	**Title**	**Guide Name**
1.	Dr. Shobha Dhananjaya Professor & Unit Chief.	Screening for Demestic Violence during Antental Period.	
2.	Dr. Preksha	Rare case of Pregnancy after renal transplant.	Dr. Shukla S Shetty
3.	Dr. Sumithra Sangavi	Pemphigus foliaceaus in pregnancy A rare case	Dr. Divakar N R
4.	Dr.Vishwas	Fetoscopic laser outcome in TTTS A case report	Dr. Praveen Kumar
5.	Dr. Ankitha B N	Medical management in recurrent heterotopic pregnancy	Dr. Shukla S Shetty
6.	Dr. Sahana. V	A rare case of Angiomyofibroblastoma of vulva	Dr. Praveen & Dr. Shobha Dhananjaya
7.	Dr. Navya	TRA Ped with acardive- headless and heartless	Dr. Lakshmi Devi. K
8.	Dr. Chaitra S R	Case report of rare congenital disorder - Phocomelia	Dr.Sarvamangala. B
9.	Dr. Haafixa Begum	Focal dermal Hypoplasia A Case report.	Dr. Divakar N R
10.	Dr. Gowri V Naik	Sirenomelia Mermaid syndrome a rare case report.	
11.	Dr. Peddireddy Sravya	Placental Chorioangioma	Dr. Shukla S Shetty
12.	Dr. Divya George	A Life and alive from Couvelaire uterus- a rare report	Dr. Shukla S Shetty
13.	Dr. Manasa K	Intrauterine fatal deaths: Clinical profile and risk factor assessment.	Dr. Ashwini M N
14.	Dr. Nidhi	Pancytopenia in pregnancy: an observation study	Dr. Chaithra. M
15.	Dr. Chaitra R Kumar	The efficiency of magnesium sulphate as an adjunct to local anaesthetics for perineal pain relief after episiotomy.	Dr. Megha H M
16.	Dr. Emani	Placental Location and Pregnancy outcomes.	Dr. Sarvamangala. B
17.	Dr. Ramya	Utility of Cerebroplacental ratio in predicting adverse perinatal outcome.	Dr. Swetha O N
18.	Dr. Divya George	Risk factors for failed induction	Dr. Shukla S Shetty
19.	Dr. Tejaswi. A	Prediction of Preterm labour by TVS measurement of cervical length at 11-14weeks and 20-24 weeks	Dr. Madhu K N
12.	Dr. Chinmayi	Assume that of primary infertility in case of endometrial Tb	Dr. Chaithra. M

DEPARTMENT OF PAEDIATRICS

1. APBLS workshop was is conducted for all outgoing MBBS students before entering into Housemen ship at BCHI auditorium, JJMMC for batch of 40-60 students by in-house BLS faculty names includes Dr. Madhu S. Pujar lead instructor, Dr. Manjunath Sarathi , Dr. Lingaraj Gowda Patil, Dr. Chaya K A and Dr. Siddharath E.S.



2. We hadan wonderful interactive programme with parents and children's along with general public at paediatric OPD demonstration room on 29th July 2022 on the occasion of world ORS Day - theme **"JODI NUMBER ONE , ORS and Zinc".**

Dr. Spoorthi, treasurer of IAP - DDB Did welcome the gathering and introduced the speakers of the function. **Dr. Raghavendra Doddamani,** Consultant Neonataologist at CG Hospital spoke on causes for diarrhoea and how to manage Non-severe diarrhea at home. **Dr. Lohith,** Consultant paediatrician of CGH spoke on how to prepare ORS and its advantages and limitations in the management of diarrhoea. Dr. Ramesh H, professor of Pediatric, JJMMC President IAP-DDB spoke on myths related to diarrhoea and it's management.

Dr Chaya KA, Associate Professor &secretary IAP-DDB spoke on primary prevention and role of safe water safe hygienic practices To prevent water borne diseases including diarrhoea and role of rotavirus vaccine Within three months of age to prevent deaths due to diarrhoeal diseases. Other faculties who were Present at the function are **Dr. Gayathri HA and Dr. Prashant Kumari.** Mothers got answers for their queries related to diarrhoea and got enlightened about the super Jody or Jodi number one that is ORS and zinc in the management of diarrhoea along with other home-made preparations.




DEPARTMENT OF ANAESTHESIA

- The department of Anaesthesiology and Critical Care, J. J. M. Medical College in association with S. S. I. M. S. & RC, Indian Society of Anaesthesia, Davanagere city branch organized a CME on "MECHANICAL VENTILATION IN CRITICAL CARE" on 8th October, 2022 at library auditorium, J.J.M.M.C. to upgrade the knowledge of post-graduate students, teachers and consultants. The speakers invited were people of excellence in critical care management from Manipal hospital , Bengaluru and also our own aluminus.

This academic feast was a brain child of Dr. D. B. Prakash, Prof: & H. O. D., J.J.M.M.C, Dr. Ravishankar R. B., President ISA, Davanagere city branch and Dr. ArunkumarAjjappa, Prof:, H.O.D,MD, S.S.I.MS.& RC. The CME was nurtured by the staff of J.J.M.M.C., S.S.I.M.S & RC , members of ISA Davanagere city branch. The post graduates had an active involvement since the conception of this CME till the successful delivery. We are indebted to the management of Bapuji Educational Association, the advisory committee which included Dr,. S. B. Murugesh, Pricipal, J.J.M.M.C., Dr. B. S. Prasad, Pricipal, S.S.I.M.S & RC., Dr. M. G. Rajashekarappa, Director, General Administration, Dr. Manjunath Alur, Dean, Research & Development, J.J.M.M.C., Dr. D. S. Kumar, M. D., Bapuji Hospital, Dr. D. Mallikarjuna, Prof: of Anaesthesiology, J.J.M.M.C., Sri Satyanarayana, Director (Administration), J.J.M.M.C., for their involvement and support for the CME. This CME was attended by around 160 delegates from all over Karnataka.

We look forward to organising many more CMEs with the support of respected advisory committee members in near future which will ensure that we remain upgraded in our knowledge and clinical skills.

Academic Achievements
STAFF

Sl. No.	TOPIC	SPEAKER	VENUE
1.	Need for setting up HDU/ ICU	Dr. Shilpashri A. M. Professor	KASOGA, DAVANAGERE
2.	Supraglottic Airway Devices In Laparoscopic Surgeries - Pros	Dr. D. B. Prakash, Prof: & H. O. D.	ISACON KARNATAKA 2022 - KALABURGI
3.	Supraglottic Airway Devices In Laparoscopic Surgeries - Cons	Dr. Prabhu B. G., Professor	ISACON KARNATAKA 2022 - KALABURGI
4.	Looking For The Unseen ? The Paediatric Neurotoxicity Quagmire	Dr. Uma B. R. Professor	ISACON KARNATAKA 2022 - KALABURGI
5.	How I manage acute post operative pain after abdominal surgery	Dr. Shilpashri A. M. Professor	CME conducted by ISA Hubballi-Dharwad city branch
6.	Obstetric drill for postpartum haemorrhage	Dr. Shilpashri A. M. Professor	Anaesthesia& critical care CME 2022 at Shridevi institute of medical sciences &research hospital, Tumakuru
7.	First aid training	Dr. Shilpashri A. M. Professor	B. COMmunity orientation 2021 at Bapuji Institute Of Hi-Tech Education
8.	Per-operative management of severe mitral stenosis ana pulmonary hypertension	Dr. M. J. Mahanthesha Sharma	CME conducted by ISA Hyderabadmetro city branchof Telangana, October 2022

Post Graduates - Paper Presentation

Sl. No.	Topic	Post Graduate	Co - Author
1.	Endotracheal Cuff Pressure Monitoring Using Prefixed Volume Air Versus Manometer In General Anesthesia	Dr. Anusha A.	Dr. Anitha Hanji S. Professor
2.	A Comparative Clinical Study Of Intravenous Dexmeditomidini And Intravenous Clonidine On Perioperative Hemodynamic Response And Postoperative Recovery From General Anesthesia	Dr. Rajashekar C.	Dr. Prabhu. B.G. Professor
3.	Comparative Clinical Study Of Occurance Rate Of Ventilator Associated Pneumonia (Vap) Using A Heated Humidifier Or A Heat And Moisture Exchanger In Icu Patients	Dr. Rajath V. Gowrav	Dr. Suma K.V. Professor
4.	Comparative Study Between Intravenous Dexmedetomidine And Oral Pregabalin To Attenuate Hemodynamic Responses During Laryngoscopy And Orotracheal Intubation During General Anaesthesia	Dr. Ravi Kiran N.	Dr. Prakash D. B. Professor

Sl. No.	Topic	Post Graduate	Co - Author
5.	A Comparative Study Between Efficacy Of Intravenous Butorphanol And Tramadol For Post Operative Analgesia In Elective Cases	Dr. Rini D' Souza	Dr. Ashok R. Professor
6.	Comparison Of Depth Of Anaesthesia : Prst Score Versus Bispectral Index In Patients Undergoing General Anaesthesia A Prospective Observational Study	Dr. Sindhu G. B.	Dr. Prabhu B. G. Professor
7.	Comparison Of 0.2 %Ropivacaine Versus Placebo For Post Operative Analgesia In Patients Undergoing Tonsillectomy	Dr. Velagala Ravitej Reddy	Dr. Ravi Shankar R.B. Professor
8.	Comparative Study Of 0.2% Ropivacaine Versus 0.2% Ropivacaine Plus Tramadol For Epidural Post-Operative Analgesia For Orthopaedic Surgeries	Dr.Uppala Sai Krishna	Dr. Ravi Shankar R.B. Professor

Post Graduates - Poster Presentation

Sl. No.	Topic	Post Graduate	Co - Author
1.	Awake Fiberoptic Nasotracheal Intubation Using La Spray In Oral Malignancy	Dr. Anusha A.	Dr. Prabhu B.G. Professor
2.	Anesthetic Management Of Emergency Cesarean Section With Portal Hypertension, Esophageal Varices And Thrombocytopenia	Dr. Rajashekar C.	Dr. Prabhu B.G. Professor
3.	Anaesthetic Management Of A Patient With Achondroplasia Undergoing Caesarean Section	Dr. Rajath V. Gowrav	Dr. Prabhu B.G. Professor
4.	Anaesthesia Management For Adenotonsillectomy With Down's Syndrome	Dr. Ravi Kiran N.	Dr. Ravi Shankar R.B. Professor
5.	Anaesthetic Management Of A Case Of Wilm's Tumour-A Case Report	Dr. Rini D' Souza	Dr. Priyadarshini M.B. Professor
6.	Anaesthetic Management For Laparoscopic Choledochal Cyst Excision In A Patient With Ehlers Danlos Syndrome Variant	Dr. Sindhu G.B.	Dr. Priyadarshini M.B. Professor
7.	ICU Management Of A Patient With Gb Syndrome	Dr.Velagala Ravitej Reddy	Dr. Ravi Shankar R.B. Professor
8.	Anaesthetic Management Of A Patient With Vonwillebrand Disease Undergoing Pull Through Surgery Post Colostomy For Rectovaginal Fistula	Dr. Uppala Sai Krishna	Dr. Priyadarshini M.B. Professor

Hearty Congratulations to Dr. Hanumanthappa A.R, professor of Microbiology for being nominated as Post Graduate Board of studies member in Para clinical Medicine of Goa University Taleigao Plateau Goa, India, for a period of three years from 04/08/2022 to 04/08/2025

Hearty Congratulations to Dr. Bhoomi Motwani, 3rd year resident Emergency medicine department, JJM medical College for bagging the 2nd place for her poster titled, 'Ocular ultrasound : a non invasive method to evaluate raised intracranial pressure in critically ill patients' at 1st annual emergency medicine state conference held in Pondicherry on the 9th and 10th of September 2022.

Hearty Congratulations to our college swim team

Lakshit Setia - 1st year

Siddharth Sahoo - 3rd year

Devaraj Naik - 3rd year

Dr. Mohit Vyas - Intern

for bagging 2 silver medals at RGUHS INTERZONALS held in Bangalore by KIMS, Bangalore for 4×100 meters medley relay and 4×200 meters freestyle relay

JJM's got Talent

ಗುರು

ಬಾನೆತ್ತರದ ವೃಕ್ಷದ ನೆರಳಲಿ ಅರಳಿದ ಹೋಗಳಂತೆ,
ಸಕಲ ಜಲಚರಗಳಿಗೆ ಜೀವನಾಡಿಯಾದ ಸಪ್ತ ಸಾಗರದಂತೆ,
ಸೌರಮಂಡಲಕೆ ಸೂರ್ಯರಶ್ಮಿ ಅದುಕಳೆ ತಂದಂತೆ,
ಹನಿಹನಿಯಾಗಿ ಸುರಿದ ಮಳೆಯದು ಹೊಳೆಯನ್ನು ತುಂಬಿದಂತೆ,
ಜ್ಞಾನವನ್ನು ಅರಸಿಬಂದ ನಮಗೆ ಸುಜ್ಞಾನದ ದೀವಿಗೆಯನ್ನು ಉತ್ತು ಕತ್ತಲೆಯಿಂದ ಬೆಳಕಿನೆಡೆಗೆ ದಾರಿಯ ತೋರೊದೊರಿ ನೀವು,
ಪ್ರೀತಿಯ ಮಾತುಗಳಿಂದ ಹುಸಿಮುನಿಸಿನಿಂದ ಜೀವನದ ಪಾಠವ ಕಲಿಸಿ,
ಜಗದ ದಾರಿಯಲ್ಲಿ ನಮ್ಮ ನಡೆಸಿ ಜ್ಞಾನ ಧಾರೆಯೆರೆದ ಗುರುಗಳಿಗೆಲ್ಲ ನಮ್ಮ ವಂಸನೆ,
ನಮ್ಮನ್ನು ತಿದ್ದಿ ಸರಿದೂಗಿಸಿ ನಮ್ಮ ಪಯಣದ ಹಾದಿಯ ಸಾಧನೆಗಳಿಗೆ ನಮಗಿಂತ ಹೆಮ್ಮೆಪಡುವ,
ಜಗದ ನಿಯಮದ ಬುತ್ತಿಯ ಧಾರೆಯೆರೆದು ಸಮಯದೊಂದಿಗೆ ಒಡುವ ಪಾಠವ ಕಲಿಸಿದ ಗುರುಗಳಿಗೀದೊ ನಮ್ಮ ವಂದನೆ
॥ ಗುರುಬ್ರಹ್ಮ ಗುರುವಿಷ್ಣು ಗುರುದೇವೋ ಮಹೇಶ್ವರ ಗುರು ಸಾಕ್ಷಾತ್ ಪರಬ್ರಹ್ಮ ತಸ್ಮೈ ಶ್ರೀ ಗುರುವೇ ನಮಃ ॥

Dr. Pramod padasalimani
PG, Dept of Paediatrics
JJMMC

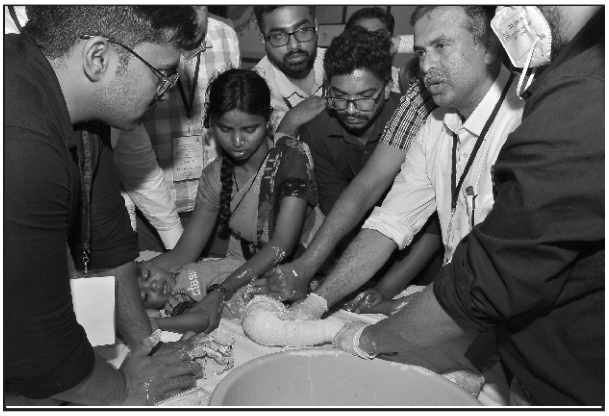
Felicitation on the occasion of Teacher's day celebration by Academic Body

CME – Department of Radiology – Hepato-biliary and pancreatic imaging

Formation of New Academic Body 2022-23

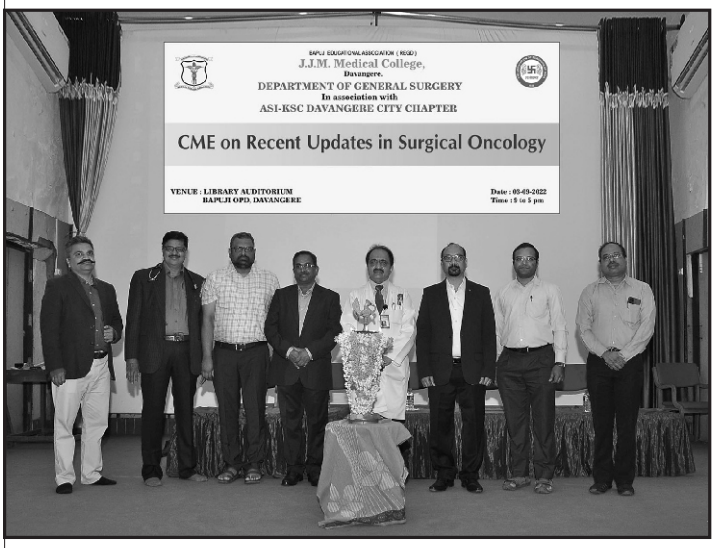
CME – Department of Microbiology – Newer diagnostic tools in clinical microbiology

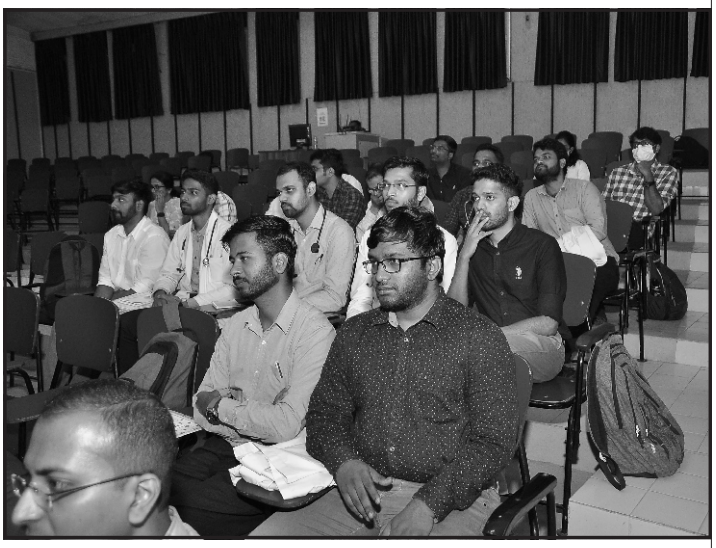
CME – Department of Orthopaedics – Clubfoot ponseti method training



CME – Department of General Medicine - Davangere Lives

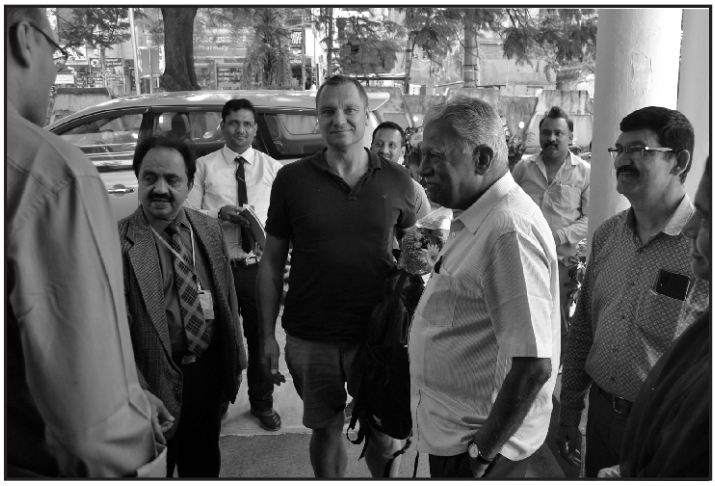
CME – Department of General Surgery - Recent updates in surgical oncology





RGUHS Belgaum Zone - Table Tennis Tournment

Visit of German Delegates to JJMMC



S S Care Trust Meeting and Health camp at St. Pauls convent

Pooja - New office

ATTENTION PLEASE

The submission for the next issue December 2022 of the News letter should be done before 30th January 2023. All the photos should be in JPEG format. Please send the copy of the material to e-mail jjmmcinsperia@gmail.com in the form of soft copy as well as hard copy through the department co-ordinator within the stipulated time and co-operate.

75th Independence Day Celebrations

EC-NCD workshop from Department of Paediatrics

EC-NCD workshop from Department of Paediatrics

CME - Mechanical Ventilation in Critical Care by Department of Anaesthesia