



# MEDi talk

MEDIHEAL GROUP OF HOSPITALS - NEWSLETTER

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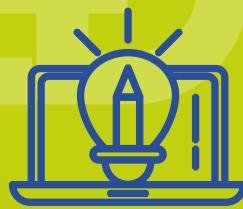


MEDIHEAL HOSPITAL, DOCTORS PLAZA, ELDORET



MEDIHEAL HOSPITALS, EASTLEIGH

# MEDi talk



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**Dr. Boddupalli Vijay Kumar**  
MBBS, MD, DA  
Chief Anaesthesiologist & Intensivist,  
Mediheal Hospital, Eldoret



**Dr. Girija Ballav Mahapatra**  
MD - Internal Medicine  
Mediheal Hospitals, Parklands



**Dr. Devendra P.  
Rahangdale**  
MBBS, MD - Radiodiagnosis  
Mediheal Hospitals, Eldoret



**Dr. Samrat A. Shah**  
MBBS, MD - Medicine,  
CCEBDM - Diabetology  
FINC - Cardiology  
Mediheal Hospitals,  
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### Dr. S. R. Mishra

MS - Obstetrics & Gynaecology (India)  
Dip. Gynae Endoscopy (Germany)  
Chairman, Mediheal Group

As I look back on the years of successful development and aspirations beginning with the establishment of Mediheal Group of Hospitals, I see a journey of one and half decades on the path of transforming healthcare in Africa. A great experience from nowhere to somewhere and one day, by the grace of God, surely everywhere across the world.

**Meditalk is the spokesperson, face value and a health digest of Mediheal.** It is going to document the good and ideal health practices. Meditalk is aimed at enhancing the health education for health professionals, patients, their relatives and everyone in general. Going forward, Meditalk will add considerable value to future health research.

This noble initiative will also play a vital role in preventive medicine while adding value to Mediheal's medical practices as we progress towards achieving global recognition in modern-day medicine.

In view of the current Corona pandemic, this is a very timely initiative and marks the beginning of a journey dedicated to all the frontline healthcare personnel, security personnel and great leaders of this world in the 21<sup>st</sup> century.

I wish to congratulate the Editor and the entire team of Meditalk for their relentless efforts and wish them the very best in their future endeavours to contain, sustain and maintain this noble initiative.

God bless us.



## **Dr. Pallavi Mishra**

**MBBS, MS - Obstetrics  
& Gynaecology**

Although technology is transforming how healthcare is delivered in Africa, the continent's healthcare system faces big challenges. Of the 20 countries with highest maternal mortality ratios worldwide, 19 are in Africa. The region also has one of the highest neonatal death rates in the world. Then there is the burden of life-threatening communicable diseases coupled with increasing rates of non-communicable diseases.

In this part of the world, infertility is also a major reproductive health problem with regional prevalence rates of 30 - 40%. We have been seeing an increased demand for infertility treatment.

In view of the increased awareness and growing demand for fertility treatments, we, at Mediheal Group of Hospitals, are working towards boosting our treatment infrastructure with evolved technology to offer comprehensive care for High-risk Pregnancy, Gynaecological Endoscopy and Infertility & Reproductive Endocrinology. We have been setting-up highly specialized facilities across the region with an aim to offer quality infertility treatment. We are employing experts in assisted conception, trained Fertility Specialists, Embryologists and specialist IVF nurses along with experienced Obstetricians and Gynecologists to ensure that we achieve our goal of superior infertility treatment in the locations we serve.

**Taking all our endeavours further, it is our pleasure to launch the inaugural issue of Meditalk, a newsletter to share a wide range of medical information on varied topics for the society at large.**

## MESSAGE FROM THE EDITOR-IN CHIEF



**Dr. Boddupalli Vijay Kumar**  
MBBS, MD, DA  
Chief Anaesthesiologist & Intensivist  
Mediheal Hospitals, Eldoret

**We are extremely happy to connect with you through the inaugural issue of Meditalk, a newsletter to share a wide range of medical information on varied and interesting topics for the established community and society at large.**

Meditalk is aimed at providing you with original and unique cases at our hospitals with reports and topics of interest to take medical awareness to greater heights. I strongly believe that Meditalk will become an important interface between the Mediheal Group of Hospitals and the readers.

We are going through an unprecedented pandemic, COVID-19, and it calls for greater awareness and precautions. My advice to one and all is to stay alert and aware with latest information available on the websites of WHO, national or local public health authorities.

Protect yourself and others from the spread of COVID-19 by some simple precautions such as hand hygiene, social distancing, respiratory hygiene, not venturing into crowded places and more importantly seeking medical attention in case of fever, cough or difficulty in breathing. The frontline healthcare providers such as doctors, nursing staff etc. are serving the society, sacrificing their comforts and risking their lives in these challenging times. Let us all applaud and appreciate their invaluable and relentless services.

Lastly, I would like to express my sincere thanks to all the authors who have made wonderful contributions to this Inaugural issue despite time constraints. I also thank our Hon'ble Chairman Dr. Mishra, whose patronage helped this magazine see the light of the day. We hope to create a milestone in medical information with this inaugural edition. I wish one and all a happy and healthy life.



**Devaki Nandan Bansal**  
Group Chief Financial Officer  
Mediheal Group of Hospitals

The COVID-19 pandemic has propelled global healthcare systems into hyperdrives of change, necessary to deal with the surge in demand. The pandemic has impacted hospitals around the world. Many hospitals have scaled back or postponed non-emergency care. This led to medical consequences for the people served by the hospitals, and has financial implications for the hospitals. Health and social systems across the globe are struggling to cope up. The situation is especially challenging in humanitarian, fragile and low-income country contexts, where health and social systems are already weak. Health facilities in many places are closing down or limiting services.

COVID-19 has caused severe economic stress to the hospitals. This has been due to the reduction in footfalls to the hospitals, scaling back the non-emergency or elective procedures and also higher cost of operations to ensure prevention of COVID-19 infections particularly the spend on the PPE kits. Generally, elective procedures contribute almost 60-70% of all surgical procedures. Due to COVID-19, revenue from these elective procedures declined largely. Medicine is different from a simple two-sided transactional retail business with analysis and projection to consider the economics of the system. Here, we have three stakeholders: doctors and hospitals, patients, and insurance companies. The latter determines the type of service, the need, the premiums/co-payments borne by patients, and the reimbursements to doctors and hospitals. Severe restrictions and stoppage of all international movements has also declined the revenue as international patients contribute to the hospitals, primarily the ones who are providing super specialty

services. Having said that, the impact on the hospitals is only short-term in nature. The patients who have to undergo elective procedures will come back when things come back to normalcy.

The COVID-19 pandemic has presented a lot of challenges to the hospitals. The hit to the economy has had a huge impact on both the supply and demand and it is likely that the business of medicine will reflect this change. The doctors and frontline healthcare personnel are always at the risk of infections. Since we have limited information about the potential impacts of this virus, healthcare personnel and doctors have to take a cautioned approach while performing higher level elective procedures like organ transplants. It also presents a challenge for developing efficient sanitization systems to prevent the spread of COVID-19 infections.

While COVID-19 has challenges, this crisis also presents an opportunity for hospitals to invest in technology. It is high time that hospitals start leveraging technology and adopting innovative solutions to deliver patient care. The area of telemedicine can be enhanced not only for patient consultations but also for remote ICU management. Hospitals need to invest into digitization of the medical records and patient data. It also presents an opportunity for localization. All hospitals need to invest in advanced tech-based medical practices so that patients can get treated locally. For governments, it is an opportunity to invest in a robust public healthcare system.



## FACIAL ARTERIOVENOUS MALFORMATION

CR  
1**INTRODUCTION:**

Vascular malformations and tumors are a heterogeneous group of lesions that may affect the arterial, capillary, venous or lymphatic system or any combination thereof. The lesions, syndromes, and masses ranging from hemangioma and **Arteriovenous Malformations (AVMs)** to rare Babska tumor and Bean tumors.

**AVMs** are rare congenital vascular malformations accounting for only 1.5% of all vascular anomalies with a 50% occurrence in the oral and maxillofacial region. It usually results from birth defects of the vasculature. Lack of meticulous diagnosis and scarcity of knowledge can result in fatal hemorrhagic incidents after various dental procedures like tooth extraction, surgical intervention, puncture wound, or blunt injury in the involved area.

**CASE REPORT:**

In September 2018 a 14-year-old girl visited surgery and radiology department with gradually increasing painless left facial swelling. A provisional diagnosis of vascular malformation was made on clinical examination and CT scan (Angiography) was advised. CT Angiography revealed multiple dilated and tortuous enhancing vessels in the left maxillofacial region; extending into the floor of the mouth (Fig 1A & 1B), supplied by external carotid artery branches and draining into internal and external jugular veins (Fig 2A & 2B) suggestive of Arteriovenous Malformation (AVM).

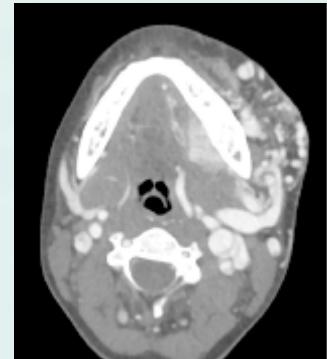


Fig 1A



Fig 1B



Fig 2A



Fig 2B

**DISCUSSION:**

AVMs are the most serious form of vascular malformation which can lead to significant deformity and functional impairment. AVM grows synchronously with the growth of the child. Puberty and trauma are found to have triggered the growth of the lesion leading to the manifestation of symptoms. Various diagnostic tools are available to diagnose vascular lesions such as Color Doppler, CT scan, MRI, and CT/MR Angiography. CT scan with iodinated contrast identifies AVMs as highly enhancing lesion and can demonstrate soft-tissue enhancement as well as dilated feeding and draining vessels. MRI can be used as an excellent technique in the diagnosis of vascular malformation.

Management of AVMs is most difficult due to the replacement of normal tissue by the diseased vessels and high rate of recurrence. Treatment may be surgical or non-surgical. The latter includes intravascular embolization with coil and/or sclerosing solutions. Surgical resection is reserved for lesions that are extensive and/or refractory to endovascular therapy. A cure is defined as the complete eradication of disease or permanent resolution of symptoms with complete devascularization. In the present case, the patient is scheduled for embolization / surgery and post-treatment follow up.

**CONCLUSION:**

In conclusion, considering the present case and literature data, we can define the following general principles of treatment. Arterial ligation should not be performed, even in emergency settings. Super selective arterial embolization is the treatment of choice and can be repeated in the case of relapse. Surgery is the option if there are no significant side effects. Lastly, the interval between embolization and surgery should be as short as possible.

Dr. Devendra Rahangdale

MD - Radiodiagnosis

Dept. of Radiology

Mediheal Hospital, Eldoret

59 yrs. old male was admitted to hospital with complaint of black colored stool, bleeding through rectum, abdominal pain since 4 days. Known hypertensive (on Enalapril 5 mg od). H/o of duodenal ulcer and hemorrhoids since two years. H/o spinal surgery for low back pain in 2018.

On examination he was pale, tachycardic and hypotensive with bilateral lower limb swelling. On further evaluation

his Hb was 7.4 gm/ dl, Creatinine 1.51, Albumin 2.7. CECT abdomen was done which showed multiple diverticulae extending from rectosigmoid to the hepatic flexure of colon.

UGI scopy showed bluish dot in d1, no active bleeding. Colonoscopy was done which confirmed CT findings with bleeding noted from the diverticulae.

In view of ongoing LGI bleed (severe anaemia with CHF) with extensive diverticuli he was planned for subtotal colectomy with Ileorectal anastomosis and SPC for urinary retention secondary to BPH.



Multiple diverticulae on colonoscopy

His post operative recovery was uneventful and was discharged on POD 9th in a stable condition.

## MANAGEMENT OF DIVERTICULAR BLEEDING

Traumatic force within the lumen of the diverticulum leads to segmental weakening of the associated vasa rectum. Rupture of these vessels into the intestinal lumen results in rectal bleeding ranging from intermittent spotting to life-threatening hematochezia.

Due to the usual advanced age and medical co morbidities of these patients, the evaluation and management of the bleeding patient must proceed in a logical manner to ensure the best outcome. Mesenteric angiography and colonoscopy are considered standard diagnostic procedures for lower gastrointestinal bleed. Despite advances in diagnostic and therapeutic technology, 10 to 25% of cases of lower gastrointestinal bleed will require surgical intervention.

**"At Mediheal, we are well-equipped to perform diagnostic, therapeutic and emergency surgical procedures for colorectal diseases."**

**Dr. Dilip Kumar Mishra**  
MBBS, MD - Internal Medicine  
Fellowship in Diabetes  
Management (CMC Vellore)  
Consultant Physician

**Dr. Chandra Mohan V.**  
MBBS, MS - General Surgery, FMAS,  
Consultant - Liver Transplant  
& General Surgery

34 years old male presented to Mediheal Hospital with chief complaints of chest pain, cough and fever on and off since two weeks. Past history of blurring vision and pain more on right eye than left eye since three months.

History of loss of weight and appetite, fever on and off, mild headache since three months, oral ulcers on and off three to four times a month since 8 years, Penile ulcers since 8- 9 years, varicose veins, polyarthralgia (knee, feet, wrists, elbow, fingers & ankles) since Jan 2014. Received ATT for 6 months after which he developed Hyperuricaemia which was controlled after use of NSAID'S.

On examination, body weight was 66kgs, with right Infra clavicular area creptitations. Initial diagnosis of Right Sided Pneumonia to rule out Koch's with B/L uveitis was made.

Ophthalmology review done and was diagnosed as Intermediate Uveitis (controlled). His lab values were Hb: 13.7gm/dl, TLC: 17.0, Neutrophils: 87%, with ESR: 82mm/hr.

Ultrasound abdomen showed Hepatomegaly and grade 1 renal parenchymal vascularity, USG Orbit showed mild thickening of left eye ball posterior chamber with increased vascularity and mild moving echoes within vitreous most likely represent uveitis.

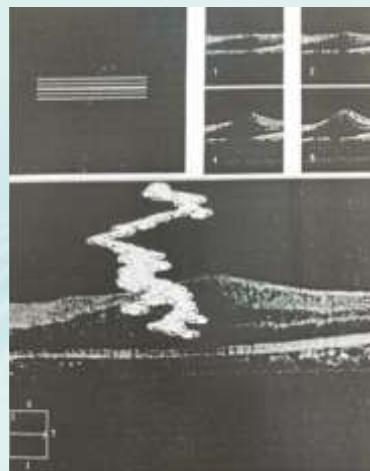


Figure 1: LE : CME+

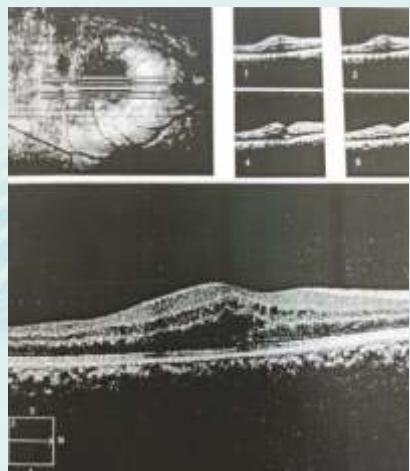


Figure 2: Disc leaks, diffuse perivasculär leak with CME both eyes

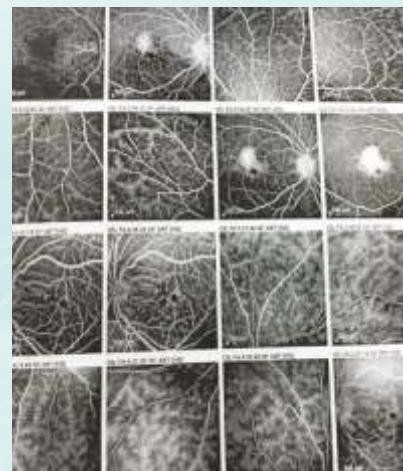


Figure 3: RE : CME +

Chest X-ray showed right upper lobe consolidation and fibro cavernous lesion. Sputum for AFB was negative three times consequently however ELISA IgG and IgM were positive for Mycobacterium tuberculosis. He was referred to higher centre for detailed evaluation of B/L Uveitis.

In view of oral and genital ulcers, polyarthralgia, B/L uveitis and arteriovenous lesions he was considered to have high possibility of Behcet's and was advised HLA B5.

HLA B5: (method) Microlymphocytotoxicity assay (Serology) was positive (B 51, B 52).

This is a rare case of Behcet's disease presented initially as a case of Pneumonia Right Upper Lobe (PTB) with intermediate uveitis.

2 year old child, raised as a male, was referred from Nakuru by Plastic Surgeon.

The child has unilateral undescended testes and micropenis, with a distal penile hypospadias. The right gonad descended. The left gonad was palpable in the inguinal canal.

The child did not have any features of adrenal insufficiency and was well grown.

**IMAGING STUDIES:** MRI of pelvis was done, and no mullerian structures were noted. The right gonad had testicular echogenicity and was descended. The left gonad was located at the deep inguinal ring.

**HORMONAL INVESTIGATIONS:** revealed good testosterone rise (20 times) with HCG stimulation, and a normal T/DHT ratio of 8.6. HCG also resulted in the gonad descending to the scrotum and an increase in the phallic length.

	Baseline	Stimulated
LH	<0.10 mIU/L	
FSH	0.725 mIU/L	
Testosterone	< 0.05 ng/ml	0.93ng/ml (93ng/dl)
DHT	108 pg/ml	

## KARYOTYPE: 46XX

This karyotype was re-confirmed, and SRY gene FISH was tested which was negative.

**DIFFERENTIAL DIAGNOSIS:** Ovo-testicular DSD or 46 XX Testicular DSD. This case is very rare with an incidence of 1:20,000.

## FURTHER MANAGEMENT:

- The mother made an informed decision about hypospadias and chordee repair. The stage one repair was done by uro-surgeon, along with a cystourethroscopy and correction of chordee at 2.8 years of age. Also the left orchiopexy was done.
- Second stage hypospadias repair is planned subsequently.
- Follow up periodically to assess growth and later onset and progression of puberty, and psychosexual development.
- Gonadal biopsy later for tissue diagnosis.
- Psychological support to the child and the family.

## TAKE HOME MESSAGES:

- A child with DSD requires a systematic and thorough evaluation. First life threatening disorder must be ruled out.
- Multi-disciplinary team is required for management.
- External genitalia, internal reproductive organs, hormonal analysis, karyotype, specific diagnosis, fertility potential, sexual function, cultural, patients and family views all are important in guiding sex assignment.
- Long term follow up is essential.
- Surgical procedures are delayed till the patient can make an informed decision but undertaken earlier if considered lifesaving.
- To know the incidence in Africa, DSD registries are needed.

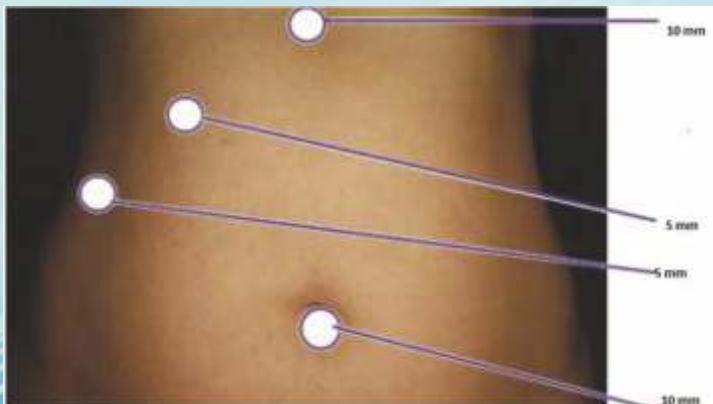
**Dr. Madhura Joshi**  
Paediatric Endocrinologist

**Dr. Mahesh Gupta**  
Consultant Paediatrician

**Dr. Sananda Bag**  
MBBS, MS - Surgery,  
M.Ch - Urology (PGIMER)  
Consultant Urologist and  
Kidney Transplant Surgeon

Minimal access surgery is completed with one or more small incisions instead of a large incision. With recent advances in MIS, combined laparoscopic procedures are now being performed for treating coexisting abdominal pathologies at the same surgery.

Combined procedures	No. of patients	Operative time (minute)	Estimated blood loss (ml)	Postoperative complications	Oral intake (hours postoperative)	Hospital stay (days)
Cholecystectomy with Epigastric Hernia	1	120.0	180	1	25	3
Cholecystectomy with Appendectomy	2	90.0	80	0	24	2



(Fig. showing Ports used for cholecystectomy and ventral hernia repair / appendectomy)

The angle the instruments make with the operative site and to each other should mimic, as far as possible to the natural relationship of the hands and eyes during conventional surgery. Pathology which contaminates or is more symptomatic has to be taken care of initially during a combined approach. In the above cases it is gall bladder removal which is primarily targeted following which other pathologies are taken care of.

Minimal access surgery offers cosmetic advantage and lesser morbidity compared to open access.

"At Mediheal Group we offer minimal access surgery comparable to excellence of world standards".

**Dr. Chandra Mohan V.**

MBBS, MS - General Surgery, FMAS,  
Consultant - Liver Transplant  
& General Surgery

Three year old male child presented to our ophthalmology department with chief complaints of inability to open his eyes for last 20 days, severe itching and burning sensation, skin lesion surrounding both eyes.



Figure showing involvement of the areas surrounding both the eyes. Small to medium erythematous papules, papulopustules, and papulovesicles, itchy red swollen cracked skin in between raw and ulcerated skin lesions present.

Intraocular lesion: Conjunctival congestion and chemosis, punctate corneal epithelial erosion thickening, crusting and vertical fissuring of the lids of the eyes.

Differential diagnosis includes allergic contact dermatitis, atopic eczema, airborne contact dermatitis, periorbital rosacea, irritant contact dermatitis and psoriasis vulgaris.



Before



After

## MANAGEMENT

He was started on broad spectrum systemic and local antibiotics to control infection followed by systemic steroids (fluoromethalone) and local steroids (mometasone skin cream) for two weeks in tapering manner. For intraocular lesion, he received moxifloxacin and fluoromethalone eye drops three times a day and lubricating eye drop for 4 weeks. Nutritional supplementation in the form of multivitamins and high protein diet was given to the patient.

At Mediheal we are well equipped to perform all types of phaco cataract, glaucoma, diabetic retinopathy cases.

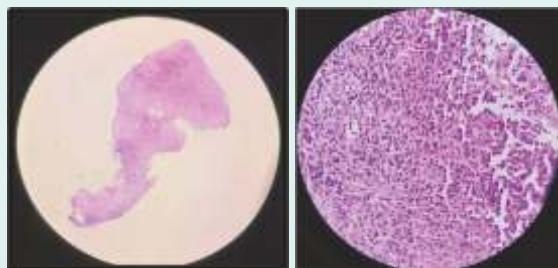
**Dr. Nirmal Kumar Narsaria**

MBBS, MS - Ophthalmology

Fellow LV Prasad Eye Institute

Medical Retina and Phaco Surgeon

- 45 years old male came with chronic ulcer like dyspepsia. Endoscopy shows a large ulcerative lesion in incisura angularis of stomach with friable mucosa. Immunohistochemistry: CD 20, Ki-67, CD 79a, Bcl-6, MUM-1 positive and pan CK, CD 3, CD 10, BCL-2 negative.



#### DIAGNOSIS: DIFFUSE LARGE B-CELL LYMPHOMA.

Primary gastric lymphoma is a rare entity with incidence of 4-20% of NHL and approximately 5% of primary gastric neoplasm. This case shows slightly lower age compared to most commonly affected which is more than 60 years.

- 28 years female, a known case of toxic nodular goitre. Near total thyroidectomy done. Thyroglobulin assay 14.2IU/ml (0.8-8.0).



#### DIAGNOSIS: FOLLICULAR NEOPLASM OF UNDETERMINED MALIGNANT POTENTIAL (FN-UMP).

The term follicular tumor of uncertain malignant potential refers to encapsulated or well defined tumors composed of well differentiated follicular cells in the absence of Papillary Carcinoma nuclei, and with questionable capsular or vascular invasion. In this case a small foci of doubtful capsular invasion (as seen in pic above) and the thyroglobulin level is raised.

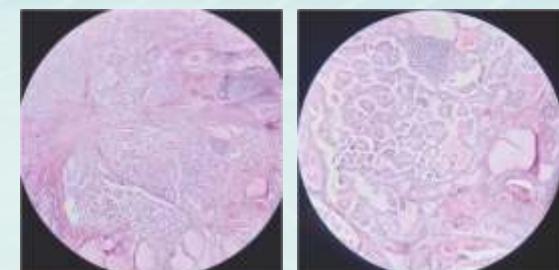
- 42 years female k/o RVD present with external nose swelling since 2 years, slow growing, painless. O/e: firm, non-tender, mobile swelling over the nasal bridge. Neurofibroma.



#### DIAGNOSIS: CHONDROID SYRINGOMA.

It is a benign tumor of sweat glands with a mucoid stroma showing cartilaginous metaplasia and morphologically identical to pleomorphic adenoma. Prevalence ranges from 1 per 1,000 to 1 per 10,000 of all primary skin neoplasms. Most common site is nose, same as this case.

- 34 years old male a case of toxic nodular goitre. Total thyroidectomy done.



#### DIAGNOSIS: PAPILLARY THYROID MICROCARCINOMA WITH MULTINODULAR GOITRE BACKGROUND.

This term is defined when there is a component of Papillary thyroid carcinoma of  $\leq 1$  cm. In this case it is an incidental finding and is usually seen in 7 - 17% of surgical thyroidectomies performed for benign or malignant thyroid lesions. The majority are indolent but some can exhibit malignant behavior.

# EXPERTISE IN DIAGNOSTIC SERVICES



## ADVANCED PATHOLOGY LABS



### AREAS OF EXPERTISE

Histopathology | Cytology (Gynec. & Non-Gynec.) |  
Clinical Chemistry | Hematology | Immunoassay |  
Microbiology | Clinical Pathology | Blood Banking &  
Transfusion

Mediheal understands the importance of accurate, specific and comprehensive diagnosis to develop an optimal plan of treatment.

Mediheal Labs present the widest range of diagnostic screenings powered by specialized teams comprising Pathologists, Radiologists, Microbiologists, Biochemists and other specialists with necessary certifications and qualifications.



## ADVANCED IMAGING

One of the world's most advanced MRI machines with predictable scheduling and consistent, high-quality personalized imaging with increased productivity.



Siemens 1.5 Tesla MRI

One of the industry's fastest and the most versatile scan machines. high quality 3D imaging for easier clinical decisions.



Siemens 64 Slice CT

## INTRODUCTION

Myasthenia Gravis (MG) is a relatively rare acquired, autoimmune disorder caused by an antibody-mediated blockade of neuromuscular transmission resulting in skeletal muscle weakness. The autoimmune attack occurs when autoantibodies form against the nicotinic acetylcholine postsynaptic receptors at the neuromuscular junction of skeletal muscles. Although the chief target of the autoimmune attack in most cases is the skeletal muscle nicotinic acetylcholine receptor (nAChR), other antigenic targets that are components of the Neuromuscular Junction (NMJ) have also been implicated.

## CASE PRESENTATION

A 15 year old male patient was admitted in emergency department/casualty in Mediheal Hospital on 8th June 2019 with excessive oral secretions, inability to clear those secretions and gasping respiration requiring intubation and ventilatory support. He had history of progressive difficulty in swallowing the food since 1 week and was recently hospitalized for the same at a nearby hospital

without any diagnostic success. His neurological examination did not show much findings except ptosis and depressed DTR. His metabolic workup was normal and MRI brain was normal. EMG/NCS was reported as normal. Patient improved slowly symptomatically with the treatment and could be weaned off from the ventilator. His Anti AChR antibodies were sent and found to be very high, indicating **Myasthenia Gravis** as the diagnosis. He had prominent bulbar symptoms at presentation which is seen in 20% of the cases. The patient is regularly following up in the OPD and doing well on medications. His CT scan chest is also done to rule out thymoma, however, his thymus gland is not enlarged.

## CONCLUSION

We report a rare case of Myasthenia Gravis.

**Dr. Parag A. Patil**  
Consultant Physician

## INTRODUCTION

Polymyositis is an idiopathic inflammatory myopathy characterized by the following

- Symmetrical, proximal muscle weakness
- Elevated skeletal muscle enzyme levels
- Characteristic Electromyography (EMG) and muscle biopsy findings

## CASE PRESENTATION

A 45 years old lady was referred from Mediheal Hospital, Nakuru and got admitted in Eldoret on 23rd Dec 2019 with progressive weakness in all 4 limbs since 3 months. Symmetrical proximal muscle weakness was more pronounced than distal muscles without any pain in muscles. She was already evaluated in Nakuru with MRI cervical spine and whole spine screening which did not show any significant lesion or compression. She did not have any bladder or bowel involvement. Clinical examination did not show much wasting or hypertrophy of

muscles. Her evaluation showed raised total CPK levels (4583 U/L) and elevated liver enzymes (AST/ALT). Other metabolic screening was normal. Her EMG/NCS showed **polymyositis**. Her muscle biopsy report confirms polymyositis. It is a classical case of **polymyositis** (points in favour- age of onset, African ancestry, weeks to months of presentation, symmetrical proximal muscle weakness without pain and characteristic EMG findings). She started on a high dose of steroids and discharged home to follow up in the outpatient department.

## CONCLUSION

We report the classical presentation of a relatively rare case.

**Dr. Parag A. Patil**  
Consultant Physician

Note: This case report was published in Volume 08, December 2019, The Kenya Journal of Anaesthesiology and Critical Care Medicine.

## ABSTRACT

### INTRODUCTION

Assessment of depth of anaesthesia is the mainstay of anaesthetic practice. Entropy measurement is an objective way of assessing both hypnotic levels (State Entropy- SE) and state of analgesia (Response Entropy -RE) during anaesthesia.

### OBJECTIVE

The objective of this case report was to demonstrate the utility of entropy in monitoring anaesthetic depth during monitored anesthetic care for high risk patients.

### MATERIALS AND METHOD

This is a case of a 58-year old male patient with end-stage renal disease, diabetes and hypertension who was diagnosed with right sided chronic subdural hematoma. Given the increased risk of morbidity associated with general anaesthesia in this case, monitored anaesthetic care with entropy (State and Response) was used. Pulse rate, blood pressure, respiratory rate and oxygen saturation were also monitored and recorded.

### RESULTS

After scalp block and sedation, there was a general reduction in both state (SE) and response entropy (RE). The maximal reduction in RE and SE was by 63% and 57% from the baseline. There was a general reduction in blood pressure, heart rate and respiratory rate, the nadir of which were within physiological limits.

### CONCLUSION

Entropy with monitored anaesthetic care may provide a safe form of intraoperative management in a high-risk patient where general anaesthesia is a relative contraindication.

### BACKGROUND

Chronic Subdural Hematoma is an encapsulated collection of blood between the dura mater and the arachnoid. (Adhiyaman, Asghar, Ganeshram & Bhowmick, 2002) Trauma to the brain is the commonest cause of chronic subdural hematoma. Other systemic factors like use of anti-platelets (clopidogrel and aspirin) may increase the risk of this disease. Ageing is associated with shrinkage of the brain and stretching of the small veins located between the brain surface and the dura mater.

Once these small veins tear or break, the blood leaks over time to form a hematoma. Depending on size and location, the hematoma manifests with the symptoms and signs which vary from simple headache to confusion and loss of consciousness with severe brain damage in some cases

Anaesthesia and surgery for chronic subdural hematoma drainage may be associated with high risk of peri-operative morbidity especially in the setting of co-existing diseases like end stage renal disease. The anaesthesia practitioner has to ensure peri-operative safety of the patient by choosing the most appropriate mode of anaesthesia.(Singh, Bansal, Kumar, Gupta, & Thakur, 2017) In this case, entropy monitoring and conscious sedation for awake burr holes and evacuation of chronic subdural hematoma was used.

### ENTROPY MONITORING

Anaesthesia involves the reversible pharmacologic depression of the neuro-endocrine system leading to loss of response and reaction to noxious stimulus (surgical incision). The objective is to render loss of awareness, analgesia, immobility and blunting of autonomic reflexes.(Brown, Lydic, & Schiff, 2010) An ideal anaesthetic agent would fulfil all the above; in addition to easy titratability to achieve desired levels of anaesthesia.(Eger, 2004) Both light and deep anaesthetic are undesirable. Light anaesthesia is associated with increased risk of awareness and pain. Very deep anaesthesia may lead to cardio-medullary depression.

Entropy is an anaesthetic depth monitoring modality. It involves the processing of Electro-Encephalography (EEG) and Frontal Electromyography (FEMG) signals into digital values, state (SE) and response (RE).(Viertiö-Oja et al., 2004) RE is based on both EEG and FEMG and indicates patient's response to external stimulus. It may signal early awakening. SE is based on EEG and indicates the hypnotic state of the patient. It may signal awareness. RE is always higher than or equal to SE. Entropy analysis has a high specificity and sensitivity in assessing the depth of anaesthesia.(Singh et al., 2017)

Table 1: Entropy Values

RE	SE	Comment
100	90	Awake
60	60	Low probability of recall
40	40	Clinically adequate for most surgical procedures
0	0	Burst suppression

**Dr. Boddupalli Vijay Kumar**  
MBBS, MD, DA  
Chief Anaesthesiologist & Intensivist,  
Mediheal Hospital, Eldoret

## INTRODUCTION

Congenital kyphotic deformity of spine is the forward curvature of spine which can be derived from failure of formation or failure of segmentation of the vertebrae. Congenital kyphosis results from developmental vertebral anomalies that impair longitudinal growth of anterior vertebral column in the saggittal plane. Even after skeletal maturity, congenital spinal deformity can develop continuously. In addition to cosmetic problems, many patients have significant back pain and functional disability due to the spinal imbalance associated with kyphosis. Others present with neurological symptoms as a result of both direct compression and over tension of the spinal cord over the deformed region. Surgical correction is the main treatment for significant congenital spinal deformity.

## CASE PRESENTATION

A 22 year female patient came to outpatient department with complaints of back pain and kyphotic deformity. Neurologically patient was intact. On X-ray type 3 deformity (mixed), where in failure of formation and failure of segmentation, was diagnosed. Kyphotic angle was measured to be 72 degrees . Posterior vertebral column resection with expandable cage and pedicle screw fixation was performed. Intraoperative awake test was performed during the cage insertion to see for any neurological deficits. Post operatively patient developed temporary paraparesis, although bladder and bowel functions were intact. Paraparesis improved completely in 20 days on postoperative follow-up. Post operative X-ray showed complete correction of kyphosis deformity.

## CONCLUSION

Congenital kyphotic deformities can be safely operated with corrective surgeries like posterior vertebral column resection or pedicle subtraction osteotomy, depending on kyphotic angle. Intraoperative awake test can be occasionally useful in addition to intraoperative nerve monitoring. Patient's satisfaction and confidence with the corrective cosmetic appearance makes this surgical procedure to be very demanding.



Preoperative image



Post-operative image

## INTRODUCTION

Pineal gland tumours are one of the rare pathologies with a very low incidence of less than 1% of all primary brain tumours. Pineal Parenchymal Tumours (PPT) represent 14% to 27% of all pineal tumours. In WHO classification of CNS tumours, PPTs are further classified as pineocytoma, PPT of intermediate differentiation and pineoblastomas. In the literature, incidence of PPT with intermediate differentiation is 66%. The optimal treatment for these tumours includes surgical removal, radiation therapy and chemotherapy. Due to low incidence, difficult location and high chances of morbidity these tumours are rarely operated, hence they are usually sent for radiotherapy or chemotherapy.

## CASE PRESENTATION

An 8 year old female patient presented to outpatient department with c/o severe headache, vomiting, vision loss in both eyes, quadripareisis and bed ridden for 2months. MRI showed pineal region space occupying lesion with obstructive hydrocephalus. EVD was done as an emergency procedure, later Craniotomy and tumour excision was performed. Postoperative CT scan showed small operative site hematoma. After 1 week EVD was blocked and was noticed that hydrocephalus was reoccurring. Hence right ventriculo-peritoneal shunt

was performed. Histopathology and tumour marker study showed that PPI of intermediate differentiation. 1 month post operative scan showed resolved hematoma and small residual tumour. Patient quadripareisis has completely improved as well as vision for near objects has improved. Patient has been sent for chemotherapy and radiotherapy. 3 months postoperative scan is awaited.

## CONCLUSION

The first treatment for pineal parenchymal tumours is surgery, if possible. The goal of surgery is to obtain tissue for determining the type of tumour and to remove as much tumour as possible without causing additional neurological deficits. Treatments after surgery may include radiation and chemotherapy.

## Dr. Rajendra Prasad A.

MBBS, DNB, Fellowship in Minimal Invasive Spine Surgery (France)  
Consultant Neurosurgeon,  
Mediheal Hospital, Eldoret, Kenya.

## INTRODUCTION

Resistance to Thyroid Hormone (RTH) is a rare dominantly inherited condition of impaired responsiveness to Thyroid Hormone (TH) where the level of thyroid stimulating hormone is not suppressed but that of thyroid hormones are elevated. Most patients with RTH have mutations in the gene that encodes the  $\beta$  isoform of the receptor of thyroid hormone (THR- $\beta$  gene). The majority of them are asymptomatic or rarely have hypo- or hyperthyroidism. The patient in our case report is, to the best of our knowledge, the first with this syndrome identified in Kenya

## CASE PRESENTATION

24 year old male came with complaints of chest pain, palpitations on and off, restlessness, emotional lability, insomnia since 3 yrs. Thyroid profile showed thyroid hormone resistance pattern. Blood sample was collected and deoxyribonucleic acid was isolated for molecular

genetic testing. The results revealed a rare mutation A268G in the gene for thyroid hormone receptor beta.

## CONCLUSION

We report the presence of a rare mutation in the thyroid hormone receptor beta gene for the first time in the Somali population. Despite rare, RTH syndrome should be considered when there are mismatches between the clinical and the thyroid functional profile.

## Dr. Samrat Shah

MD - Internal Medicine  
CCEBDM - Diabetology,  
FINC - Cardiology  
Consultant Physician,  
Mediheal Hospitals, Nairobi

Note: This article was published in May 2019, Volume 06, The Kenya Journal of Anaesthesiology and Critical Care Medicine.

## INTRODUCTION

Blunt chest trauma is common in motor vehicle accidents, falls and sports. The incident rate of blunt chest trauma is high in productive age group.

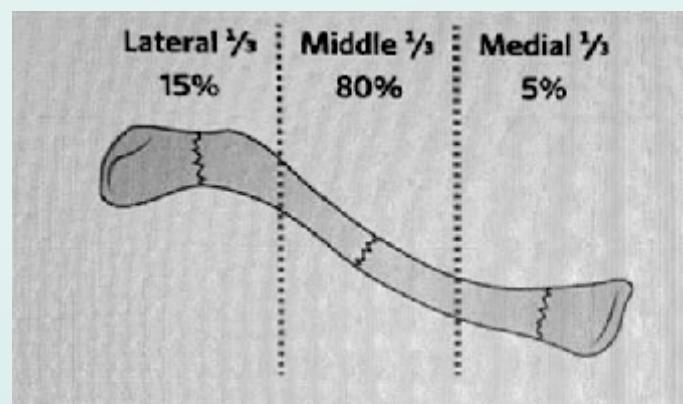


Fig 1: Classification of Clavicle Fractures by Location

1. Lateral-15%
2. Middle-80%
3. Medial-5%

	No. of Pts.	2 or >2 Ribs#	Multiple Ribs 3 or>3#
Pulmonary Contusion	139	15	12
Pulmonary Laceration	3	0	3
Pneumothorax	40	10	30
Haemothorax	45	5	40
Haemo Pneumothorax	25	3	22
*Fracture Clavicle	11	1	10
Sternal Fracture	6	2	4
Scapula Fracture	5	0	5

Courtesy: Trakia University; Bulgaria 2017.

Fig 2: In Blunt Chest Trauma: Associated Ribs Fracture and Chest injuries according to the type of Ribs Fractures.

## CASE REPORT

An 85kg 63 years old male presented to hospital with a fracture of the right side middle clavicle. The patient sustained blunt chest trauma due to head on collision of his moving motor vehicle with another motor car on the 12th September 2018.

**Chest X-ray:** Right clavicle middle comminuted fracture. Right lower lobe Contusion/consolidation. Right side fractures of the first to sixth ribs.

Patient was admitted into ICU. He was dyspnoeic, pulse rate 100/min, SpO<sub>2</sub> on room air hovering around 84%, BP 140/80 mmHg, Resp. rate 20 to 22/min. Patient was conservatively managed with O<sub>2</sub> mask, analgesics and the beach chair position for 2 days. On the 14th of September, the vital signs were: Pulse rate 80/min, BP 137/77 mmHg, Resp. Rate around 22/min., SpO<sub>2</sub> on room air ranging 84% to 86%, and rising to 95% on 5 liters of oxygen by mask. Examination of the cardiovascular and central nervous system were unremarkable.

Airway examination revealed a receding mandible with an anterior placed larynx (difficult intubation). Air entry on the right side of the chest was reduced on auscultation.

## PROBLEMS

Difficult airway-difficult intubation, SpO<sub>2</sub>-on room air-84% to 86%.

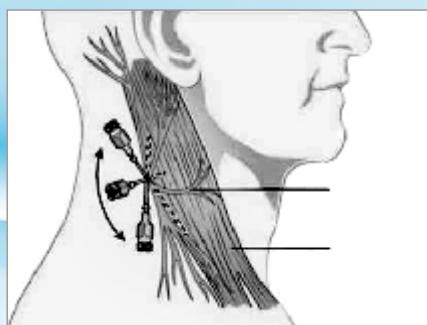
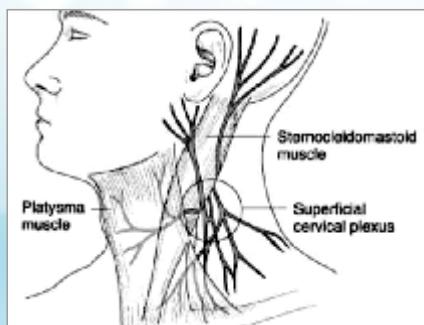
A decision to perform ORIF on the clavicle under regional anaesthesia was made: Ultrasound guided Interscalene Brachial Plexus Block + Superficial Cervical Plexus Block. The patient lay on the table in Semi-Fowler's position at 30 degree with his face to the left side. O<sub>2</sub> mask with 5 lit/min was administered, Inj. midazolam 1mg. & inj. Fentanyl 50 +25 mcgs given intravenously in titration with spo<sub>2</sub>. Regional anaesthetic solution was prepared: 12.5ml of 0.5% Bupivacaine + 12.5ml of 2% xylocaine with adrenaline

## INTERSCALENE BLOCK

Under ultrasound guidance, a Linear Probe (high frequency) was used to locate the plexus, a 22G spinal needle was inserted in posterior approach and 15ml of the prepared local anaesthetic solution was injected around the plexus(signal light area) aseptically.



Fig 3: Interscalene block-Needle pointing to the Traffic signal sign.



**Superficial Cervical Plexus Block:** It was performed as plane block with 10ml of the prepared regional anaesthetic solution injected through a marked point in fan shape. The marked point was a line drawn from the tip of the mastoid process along the posterior border of the clavicular head of the SCM with the midpoint of the line i.e. where the external jugular vein crosses was the point of needle insertion. 25G, 1 ½" needle was inserted 1 to 1.5cm depth behind the SCM to avoid the deeper block.

Onset of action of the block was within 10 minutes and clavicle surgery commenced (plate and screws fixation) and completed successfully in an hour without any complaints of pain or discomfort from the patient. Vital signs remained stable through the procedure with little variation: pulse rate 80+or- 10/min, BP 130/77 + or - 7 mmHg, SpO<sub>2</sub> on O<sub>2</sub> mask 5lit/min 93 +or- 3%. There was no necessity of any additional analgesics intra-operatively.

Effective analgesia as reported by the patient lasted approximately 150 minutes and tramadol and paracetamol were subsequently utilized for postoperative analgesia.

15.09.2018: 1st postoperative day or 72 hours after accident SpO<sub>2</sub>...77% on room air. CT chest confirmed the right lung lower lobe contusion.

16.09.2018: 2nd postoperative day or 4 days after accident SpO<sub>2</sub>...88% on room air & 94% with O<sub>2</sub> mask

**Dr. Boddupalli Vijay Kumar**

MBBS, MD, DA

Chief Anaesthesiologist & Intensivist,  
Mediheal Hospitals, Eldoret

A rare case of quadruplet pregnancy, reaching 34 weeks, with healthy outcome.

## CASE HISTORY

A 30 year old female G2P1L1 conceived with ovulation induction, clomiphene citrate, had uneventful antenatal course, received steroid cover for lung maturity at 29 weeks, admitted at 34 weeks with high BP and leaking pv. Emergency LSCS was performed and she delivered four healthy babies.

First female child 1.7 kg, second female child 1.7 kg third female child 1.5 kg and forth male child 1.8 kg. all had

good APGAR scores and were observed in NICU for 3-4 days and discharged to mother when breast feeding well. However mother was diagnosed to have HELLP syndrome , developed postpartum eclampsia, had low platelet counts 87000 at time of Cs dropped to 46000 next day. Liver enzymes were high, S.creatinine 1.7. Patient was observed in ICU for 24 hours, magnesium sulphate was given and strict monitoring of vitals done. Later, sent to ward after the parameters were normalizing. Mother and the four babies went home on day 7 post OP.



## CONCLUSION:

Average gestational age for delivery of quadruplets is 30 weeks. It's a rare phenomenon to reach 34 weeks with minimal NICU stay and morbidities. High order pregnancies are usually associated with high risk of maternal and fetal complications.

**Dr. Geetanjali Patil**  
Consultant - Obs & Gyn  
Mediheal Hospitals,  
Eldoret



## EXPERTISE IN ASSISTED REPRODUCTIVE TECHNIQUES (ART)



- Pioneer in assisted reproductive techniques in Africa.
- Offering hope for childless couples with a host of therapeutic and surgical interventions for optimum reproductive health.
- Over 1200 IVF cycles every year with highest success rate.

## SERVICES

- IVF, ICSI & IUI
- High-Risk Pregnancies
- Gynaec Cancer Management
- Hysterectomy (Abdominal/Vaginal)
- Ovarian Cystectomy
- Tubectomy
- Ovarian Cyst
- Polycystic Ovary Syndrome (PCOS/PCOD)
- Myomectomies
- Orphorectomies
- Ectopic Pregnancy
- Caesarean Section
- Infertility Treatment
- Post-menopausal Bleeding
- Dysfunctional Uterine Bleed

Synovial chondromatosis is a benign proliferative disorder with metaplasia of synovial membrane that affect the fibroblast of synovial joints, tendons and bursae. Osteochondromatosis can affect any joint but the great majority of the cases involve the knee. In the upper limbs, the joint most affected is the elbow, literature also shows the involvement of shoulder, wrist, acromioclavicular and interphalangeal joints.

The first case of synovial chondromatosis in the knee joint was described by Ambrose Pare in 1558. The first case in the elbow was reported by Henderson in 1918. In the literature there are few descriptions of synovial osteochondromatosis of the elbow mainly concerning surgical results.

Synovial osteochondromatosis is classified as a primary when it originates directly from the metaplasia of the synovial tissue or the bursa or as a secondary when the free bodies originate directly from the hyaline cartilage and are deposited in the joint space or in tendon sheath due to degenerative disease, trauma and neuropathic arthropathy. It can be subdivided into intra articular and extra-articular type.

The objective of this paper was to report a case of synovial osteochondromatosis of the elbow in a 50 years old senior policeman for whom the surgical treatment was chosen because of clinical condition of pain and functional limitation due to many free bodies.

## CASE REPORT

The patient was middle aged senior policeman presented to outpatient department with 2 weeks before surgery with pain and inability to perform full range of motion. The

limitation of elbow motion and pain began six months earlier. He had no history of trauma, no history of systemic disease or previous surgery. He took conservative treatment but there was no improvement. On inspection it was noted that one elbow had some swelling without any inflammatory signs. On clinical examination he had boggy tender swelling around the elbow. On palpation he had firm to hard multiple bony masses. The range of motion was with flexion deformity of 15 degrees to 110 degrees of flexion. Neurological and vascular examination showed normal findings.

On radiological examination there were numerous loose bodies seen in and around the elbow joint. Test to rule out infective and inflammatory conditions were done which were negative. Magnetic resonance imaging showed numerous loose bodies especially in the anterior compartment and posteriorly in the distal part of humerus. MRI also showed some osteochondral changes in the capitellum.

Due to severe limitation of range of motion and associated pain decision of arthroscopic treatment was taken. Using standard anterior portals partial synovectomy and loose body removal was done. One of the posterior portal, central portal was opened minimally to remove the large loose bodies which were amalgamated together. The material was sent for histopathological examination which subsequently confirmed the diagnosis.

Post-operatively, the patient was mobilised with active assisted and passive range of motion and the sutures were removed on the postoperative 12th day. The patient could re-gain the full range of motion in next three weeks.



Fig.1: X-ray showing multiple loose bodies around the elbow joint



Fig.2: Patient positioning in operating room during elbow arthroscopy



Fig.3: Loose bodies removed



Fig.4&5: X-ray images showing complete removal of loose bodies

## CONCLUSION:

Arthroscopic treatment of synovial osteochondromatosis of elbow has been shown to be an effective and safe means of therapeutic management for this condition with low morbidity and early return to a range of motion

**Dr. Kartikeya Pramod Joshi**  
Consultant Orthopaedic Surgeon,  
Mediheal Hospitals, Nairobi

The management of the symptomatic irreparable cuff tear is extremely challenging. There are no ideal solutions to this problem. Many patients respond to the conservative management. Some are non-responders with persistent pain and disability in the form of pseudoparalysis. The treatment dilemma lies with the younger aged active patients with massive irreparable cuff tears with minimal or no glenohumeral arthritis. In such patients the results of tendon transfer are excellent. The latissimus dorsi muscle +/- teres major was used for the transfer to fill the deficit due to posterosuperior cuff massive irreparable tear. The latissimus dorsi is a large and strong muscle from the dorsolateral side of the trunk mainly being internal rotator of the humerus. This muscle is transferred based on the original principles of L'Episcopo muscle transposition done in children for congenital brachial plexus lesion.

In this study, we report a case of a young patient with early glenohumeral arthritis suffering with severe pain and limitation of motion of the shoulder joint. He was treated in the past for arthroscopic rotator cuff repair which failed with due course. The repeat magnetic resonance imaging showed irreparable posterosuperior rotator cuff tear with significant muscle atrophy. The conservative treatment was initiated for a period 03 months in the form of motion exercises and isometric muscle strengthening. He had persistent pain and muscle weakness and also presented with pseudoparalysis. On shoulder examination he had

external rotation lag sign positive, with weak infraspinatus muscle on external rotation resistance test. He had good subscapularis strength. His cervical spine examination was normal. There was neurological deficit. We had achieved good passive range of motion following the physiotherapy. The decision of surgical management in the form of latissimus tendon transfer was taken.

## SURGICAL PROCEDURE

The patient was operated in lateral position under general anaesthesia. The tendon is harvested by cosmetic axillary incision after carefully securing the neurovascular bundle. The harvested tendon is buried into the wound after its end preparation. Then traction is applied and diagnostic arthroscopy is done followed by footprint preparation. The harvested tendon is pulled out through the lateral portals by mini-open approach. The harvested tendon is then fixed using 2-3 titanium suture anchors. The end of the tendon is then sutured to the subscapularis for better fixation and reduction. The transposed tendon wraps well around the infraspinatus and supraspinatus foot print to achieve a good external rotation and abductor movement. The patient is kept in abductor external rotation brace for a period of six weeks. The passive and active assisted external rotation exercises are started from day one postoperative. The X-ray was done to see the position of the anchors and reduction of the glenohumeral joint.



Fig.1: Axillary incision to harvest latissimus dorsi tendon



Fig.2: Identification of the latissimus dorsi tendon from its humeral insertion after securing neurovascular structures



Fig.3: Mobilising and harvesting the tendon out of the wound following the release of thoracodorsal nerve and vessels.



Fig.4: Harvested teres major and latissimus dorsi tendon in a different patient



Fig. 5: X-ray image showing suture anchors with restoration of Shenton's line

## CONCLUSION:

The purpose of this report is the presentation of the surgical option available for such massive irreparable rotator cuff tear in a young active patients without glenohumeral arthritis. These are the one of the specialized surgeries with less available literature support (national), which are performed here in Mediheal Group of Hospitals Nairobi, Kenya.

**Dr. Kartikeya Pramod Joshi**

Consultant Orthopaedic Surgeon,  
Mediheal Hospitals, Nairobi



## DISTRIBUTION OF VARIOUS HISTOLOGY PROVEN CANCERS IN OUR HOSPITAL FROM 2000 SPECIMENS STUDIED OVER THE PERIOD OF 20 MONTHS

SR  
1

We have started our in-house histopathology and cytopathology diagnostic services from December 2018 along with specialized chemistry investigations which includes serum tumor markers, hormones and enzymes. We have a Turn Around Time (TAT) of 1 day for cytology (FNAC, PAP smear and aspirated fluid cytology), 2 days for diagnostic small biopsies (endoscopic, radiology guided aspiration/tru-cut and wedge biopsies and 5 working days for radical large and complex cancer specimens. Immunohistochemistry, PCR/FISH based molecular and renal transplant related tests are outsourced to India with 15 days TAT. Intra-operative consultation by squash/imprint cytology is started and all cancer cases are reported according to College of American Pathologist (CAP) cancer protocols. Here we present data of histology proven cancer cases of 2000 biopsy specimens.

Total specimens examined: **2000**

Total duration: **20 months** (From Dec 2018 to July 2020)

Cancer cases: **370**

Percentage of cancer cases which are biopsy proven:

**18.5 %.**

Distribution of various cancers are as follows –

### A. GASTROINTESTINAL TUMORS – TOTAL 140 CASES (38.0 %)

1. Esophagus – squamous cell carcinoma: 60
2. Colorectal – adenocarcinoma: 37
3. Stomach – adenocarcinoma: 29
4. Gastrointestinal Stromal Tumors (GIST): 10
5. Neuroendocrine Tumors (NET): 04

### B. BREAST AND FEMALE GENITAL TRACT – TOTAL 60 CASES (16.0 %)

1. Breast – invasive duct carcinoma: 25
2. Cervix – squamous cell carcinoma: 14
3. Ovarian tumors (mostly serous carcinomas) : 14
4. Endometrium – adenocarcinoma: 05

5. Vulva - squamous cell carcinoma: 02

### C. HEMATOLYMPHOID MALIGNANCY

#### - TOTAL 50 CASES (13.0 %)

1. Leukemia (AML, CML, ALL, CLL): 20
2. Lymphoma (mostly NHL-DLBCL): 20
3. Multiple myeloma and plasmacytoma: 10

### D. BRAIN AND SPINE TUMORS – TOTAL 35 CASES (09 %)

1. Meningioma: 18
2. Pituitary adenoma: 05
3. Glioblastoma: 02
4. Others: 10 (Hemangioblastoma, Pilocytic Astrocytoma, Central Neurocytoma, Oligodendrogioma, Schwannoma, Anaplastic Astrocytoma, Pineal Parenchymal Tumor, Medulloblastoma, Orbital Pseudo tumor)

### E. OTHER TUMORS – TOTAL 85 CASES (24.0 %)

1. Prostate – adenocarcinoma: 24
2. Lung (NSCLC and NET): 07
3. Oral and nasopharyngeal squamous carcinoma: 12
4. Pediatric tumors (Sialoblastoma, Wilms' tumor, Hepatoblastoma, Desmoid Fibromatosis): 06
5. Salivary gland tumors (Adenoid cystic, Oncocytic, Acinar, Myoepithelial): 06
6. Bone and soft tissue tumors: 13 (Malignant Melanoma, Squamous carcinoma, Fibrosarcoma, Liposarcoma, Kaposi, Ewing's Tumor, Osteosarcoma, Rhabdomyosarcoma, DFSP, Basal cell carcinoma, Pleomorphic Undifferentiated sarcoma)
7. Thyroid (Follicular, Papillary Carcinoma): 03
8. Testis – Leydig cell tumor: 01
9. Urinary bladder – urothelial carcinoma: 03
10. Liver, Pancreas and Gall bladder (HCC, cholangiocarcinoma, adenocarcinoma): 1

We compare our data with **GLOBOCAN 2018** cancer incidence with World and Kenya rank.

Rank	World	%	Kenya	%	Mediheal, Eldoret	%
1	Lung	11.6	Breast	12.5	Esophagus	16.2
2	Breast	11.6	Carcinoma Cervix	11.0	Colon & Rectum	10.0
3	Colon & Rectum	10.0	Esophagus	9.1	Stomach	7.8
4	Prostate	7.1	Prostate	6.0	Breast	6.7
5	Stomach	5.7	Colon & Rectum	4.6	Prostate	6.4
6	Liver	4.7	Stomach	4.4	Non-Hodgkin Lymphoma	5.4

The most common group of cancers were GIT (34%) with esophageal cancers on the top rank. Etiologic agents may be mycotoxin contamination of food like stored maize ugali, fermented milk, smoked, undercooked, hot meat and traditional alcohol consumption. Due to availability of upper GI endoscopy, colonoscopy and biopsy histopathology reporting facility, GIT cancers are diagnosed within three days in our hospital. For breast and prostate cancer diagnosis, we have facility of Ultrasonography, Mammography, CT scan, MRI, USG/CT guided FNAC / trucut needle core biopsy procedure and histopathology reporting within three days. It is followed

by radical surgery / chemotherapy depending upon stage of cancer diagnosed.  
In future, with addition of in-house IHC, PCR based molecular tests and radiation oncology services, we will have an in-house **state-of-the-art oncology center** for cancer patient management.

### Dr. Kush Dayaram Raut

MBBS, MD (Pathology)

Consultant Histopathologist, Dept. of Pathology,  
Mediheal Hospital & Fertility Centre, Eldoret, Kenya

## A BRIEF OVERVIEW OF KIDNEY TRANSPLANT RECIPIENTS

SR  
2

**Total No. of Transplants done from Nov 2018 - Feb 2020 : 80 cases**

**Age 60+:** 6 patients

**Pediatric:** 12 yrs, 1 patient

### High Risk Patients

**Surgical:** 3 (1 vascular anomaly, 2 simultaneous native kidney Nephrectomy+ Tx Multiple Renal arteries 10)

**Anesthetic:** 3 (1 Obesity OSA, PAH 1 Thymo induced ARDS done under epidural anesthesia 1 OSA with SVC syndrome all recovered with delayed extubation and ICU care)

**Medical/Immunological:** Around 40% mild to moderate degree of sensitization requiring some form desensitization including plasma ex/IVIG depending on the degree of DSA levels.

Around 40% patients having uremic cardiomyopathy in the form of severe LVH/diastolic/systolic dysfunction/PAH and valvular leaks of varying grades requiring aggressive dialysis preTx with all the parameters improving following the transplant.

4 patients had severe secondary hyperparathyroidism requiring treatment before transplant and one patient needed partial parathyroidectomy/hemi thyroidectomy before the transplant for uncontrolled tertiary hyperparathyroidism with parathyroid adenoma/thyromegaly proven on parathyroid Sestamibi nuclear scan/and FNAC

2 patients: HBsAg +Ve 3 patients HIV +Ve who underwent successful transplant after control of viral loads and continuing the antiviral drugs

1 patient II Tx

Donor Nephrectomy mostly → 95% Laparoscopic

All the patients received induction with thymoglobulin and IV methylprednisolone

Average Post Op recovery time in recipients 7 days (5-10) in 90% of patients .Incidence of delayed graft function /ATN 6 patients

All the patients doing well after the transplant returned to work by 6-8 weeks Post Tx

**Dr. A. S. Murthy**  
Consultant  
Nephrologist &  
Kidney Transplant  
Physician

**Dr. Sananda Bag**  
MBBS, MS - Surgery,  
M.Ch - Urology (PGIMER)  
Consultant Urologist and  
Kidney Transplant Surgeon

**Dr. Boddupalli Vijay Kumar**  
MBBS, MD, DA  
Chief Anaesthesiologist  
& Intensivist

**Dr. Vaijyanath**  
DNB, DA  
Consultant  
Anaesthesiologist

## INTRODUCTION

Low back pain with or without radiculopathy is a very common problem from which many patients suffer. Causes include disc prolapse, disc osteophyte complex, infections, epidural adhesions, tumours. Most of the disc prolapse can be managed conservatively. Patients who fail to improve from medical management or worsening neurological deficits can be offered surgical management. Surgical management's primary goal includes neural decompression. Surgical management includes open or minimal invasive techniques. Most of the degenerative spine diseases can be treated without destabilizing the spine henceforth without using implants.

## STUDY REPORT

This study includes 52 patients who were suffering from low back pain with or without radiculopathy who have failed to improve from medical management and life style modifications. Out of 52 patients 35 patients were having disc prolapse with nerve root compression, 13 had disc-osteophyte complex with foraminal stenosis, 2 had thick adhesions around the nerve root and 2 patients were having tumour compressing the nerve root. Most common pathologies were located at L4-5 and L5-S1 levels. All 52 patients have been operated with minimal invasive technique by using a microscope or endoscope. Skin incision for single level surgery was 18mm and for two levels surgery was 25mm. There was minimal usage of cautery for separating muscle from spinous process and lamina. Small laminotomy was performed and disectomy (or) one side/ bilateral foraminal decompression (or) biopsy was performed based on the pathology. Most of the patients got immediate and prolonged pain relief, exception being patients with tumour. Few patients complained of mild operative site stiffness after 2-3months, which was relieved by physiotherapy.

## CONCLUSION

Minimal invasive spine surgery is very effective alternative to open surgery. Either single or two level pathologies can be easily treated with this technique. As the stripping of muscles is minimal and done only on one side, our study and literature proves that post operative morbidity is very less. Usage of microscope or endoscope gives a significant amount of magnification and illumination. Usage of implants can be reduced with this technique, as a result, segmental mobility can be maintained and also economical burden can be reduced to the patient



Postoperative image showing skin incision size less than 2 cm.

**Dr. Rajendra Prasad A.**

MBBS, DNB, Fellowship in  
Minimal Invasive Spine Surgery (France)  
Consultant Neurosurgeon,  
Mediheal Hospital, Eldoret



## INTERNATIONAL DESK



Welcoming the guests visiting our facilities - Mr. Limbaya Director, SNEL Bukavu (Congo) and Mr. Olivier Ndikumana from Burundi.



Visit of Dr. Nazaire Nseka, President, Congolese Society of Nephrology (Soconeeph) complimenting Dr. Pallavi Mishra - Director Mediheal Group of Hospitals and Dr. Sanand Bag - Chief Transplant Surgeon for running a successful Renal Transplant Program and also on willingness to share best practices for capacity building in Congo.



Mr. David Angoyo, Director, REGIDESO from Goma (Congo) with Dr. G. B. Mahapatra, Consulting Physician.

### All smiles!

Happy patients returning back to their country after a successful procedure.



Ms. Ndabahweje Seraphine and Ms. Sekunda with Alex Cinamula, Country Manager for Francophone countries in Africa.

# DOs AND DON'Ts TO PREVENT COVID-19 INFECTION

## HAND WASH

Washing hands regularly for about 30 seconds with soap or hand sanitizer will help prevent any kind of infection. Do this every time you travel or touch anything.

DOS



WATER  
AND SOAP



PALM  
TO PALM



BETWEEN  
FINGERS



FOCUS  
ON THUMBS



BACK OF  
THE HANDS



FOCUS  
ON WRISTS



FREQUENT  
USE OF SANITIZER

## COVER YOUR MOUTH & NOSE



Cover your mouth and nose from sneezes and coughs to prevent yourself from the virus. Virus Spread is usually through cough and sneeze.

## SNEEZE ON YOUR ELBOW OR HANDKERCHIEF



Maintain hygiene by sneezing on your elbow or use a handkerchief to prevent your saliva particles from spreading.

DON'TS

## DON'T TOUCH YOUR FACE AND UNNECESSARY SURFACES



Do not touch your face, nose and mouth often. This prevents the risk of contracting the virus. Wash your hands regularly with a soap or hand sanitizer.

## DO NOT SPIT



Spitting can increase the spread of the virus. Avoid spitting in public and at home. Also, avoid getting close to a sick person suffering from cold and cough.

## AVOID CLOSE CONTACT WITH ANYONE



Do not get too close to anyone. Avoid touching or laughing in close proximity to another person. Do not use the utensils used by others. Wear good quality masks whenever you are going out. These simple 'no touch' rules will keep you safe until the outbreak comes to an end.

# MEDICAL QUIZ



What is the shape of blood cells?

- A. Doughnuts
- B. Eggs
- C. Tubes

Which type of cell is found in the brain?

- A. White Blood Cells
- B. Neurons
- C. Epithelial Cells

Which is the largest organ in the human body?

- A. Heart
- B. Liver
- C. Skin

Which is the largest bone in the body?

- A. Scapula
- B. Femur
- C. Tarsal

How many bones do babies have when they are born?

- A. Between 100 - 150
- B. Between 150 - 270
- C. Between 270 - 350

Which is the only part of the body that can't heal and repair on its own?

- A. Heart
- B. Tooth
- C. Earlobe

How many bones are in a human skull?

- A. 18
- B. 22
- C. 34

Which is the only bone that is not attached to another bone?

- A. Pelvis
- B. Clavicle
- C. Hyoid

Which of the following insects is known to carry Lyme disease?

- A. Honeybees
- B. Earthworks
- C. Ticks

Which condition do people who are allergic to bee sting suffer if stung?

- A. Atherosclerosis
- B. Anaphylaxis
- C. Conjunctivitis

Which of the following is not a type of Diabetes?

- A. Juvenile Diabetes
- B. Type 2 Diabetes
- C. Senior's Diabetes

How many taste buds does an average human tongue have?

- A. 10,000
- B. 100,000
- C. 1,000,000

Babies are born without which bone?

- A. Knee Cap
- B. Collarbone
- C. Ankle

# COMIC TONIC



Why did the doctor tell the nurse to walk past the pill cupboard quietly?

So that she would not wake up the sleeping pills!



Never ask Google for medical advice, I have gone from mild headache to clinically dead in just 3 clicks.

Did you hear about the guy who lost his while left side?

He is ALL RIGHT now!



What did man say to the X-ray technician after swallowing some money?

Did you see any CHANGE in me?

They tried to save him with an IV, but it was all IN VEIN!

A man speaks frantically into the phone, "My wife is pregnant, and her contractions are only two minutes apart!" "Is this her first child?" the doctor asks.

"No, you idiot!" the man shouts, "this is her husband!"



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## MEDIHEAL CENTRES



**MEDIHEAL HOSPITAL AND FERTILITY CENTRE, ELDORET**  
Nandi Road,  
PO Box: 7905 - 30100,  
Eldoret, Kenya  
T: +254 723 578 895 /  
735 864 169



**MEDIHEAL HOSPITALS (PARKLANDS), NAIROBI**  
PO Box: 39698 - 00623,  
Parklands Medi Plaza,  
3rd Parklands Avenue,  
Opp. Aga Khan Hospital,  
Nairobi, Kenya  
T: +254 736 638 073 /  
722 218 416



**MEDIHEAL HOSPITALS, NAKURU**  
Nakuru - Nairobi Highway,  
PO Box: 17226 - 20100,  
Nakuru, Kenya  
T: +254 735 000 735 /  
780 278 000



**MEDIHEAL DIAGNOSTIC, DIALYSIS & DAYCARE CENTRE, NAIROBI**  
PO Box: 39698 - 00623,  
Real Tower, Hospital Road,  
Next to KNH, Upper Hill,  
Nairobi, Kenya  
T: +254 712 935 390



**MEDIHEAL HOSPITALS, EASTLEIGH**  
PO Box 2565 - 00610,  
Section-3, 19th street.  
Eastleigh First Avenue,  
Nairobi Kenya  
T: +254 781445 566 /  
+254 74044 5566



**MEDIHEAL DIAGNOSTICS & FERTILITY CENTRE, KIGALI**  
Plot No. 252, Kimihurura  
Main Road, KN 14 A7, Near  
Cadillac Club, PO Box: 958,  
Kimihurura, Kigali, Rwanda  
T: +250 789 184 444 /  
726 602 020