VOLUME - II, MARCH 2018

Royal Care

CHAIRMAN'S COLUMN

Expansion of the hospital from 180 beds to 500 beds has been running in full swing. Intensive care beds shall increase from 18 beds to 45 beds before June 2018 in this expansion. Within the second year of functioning, a fully functional super speciality hospital has rose to serve the people of this area with ease of accessibility, compassion & transparency.

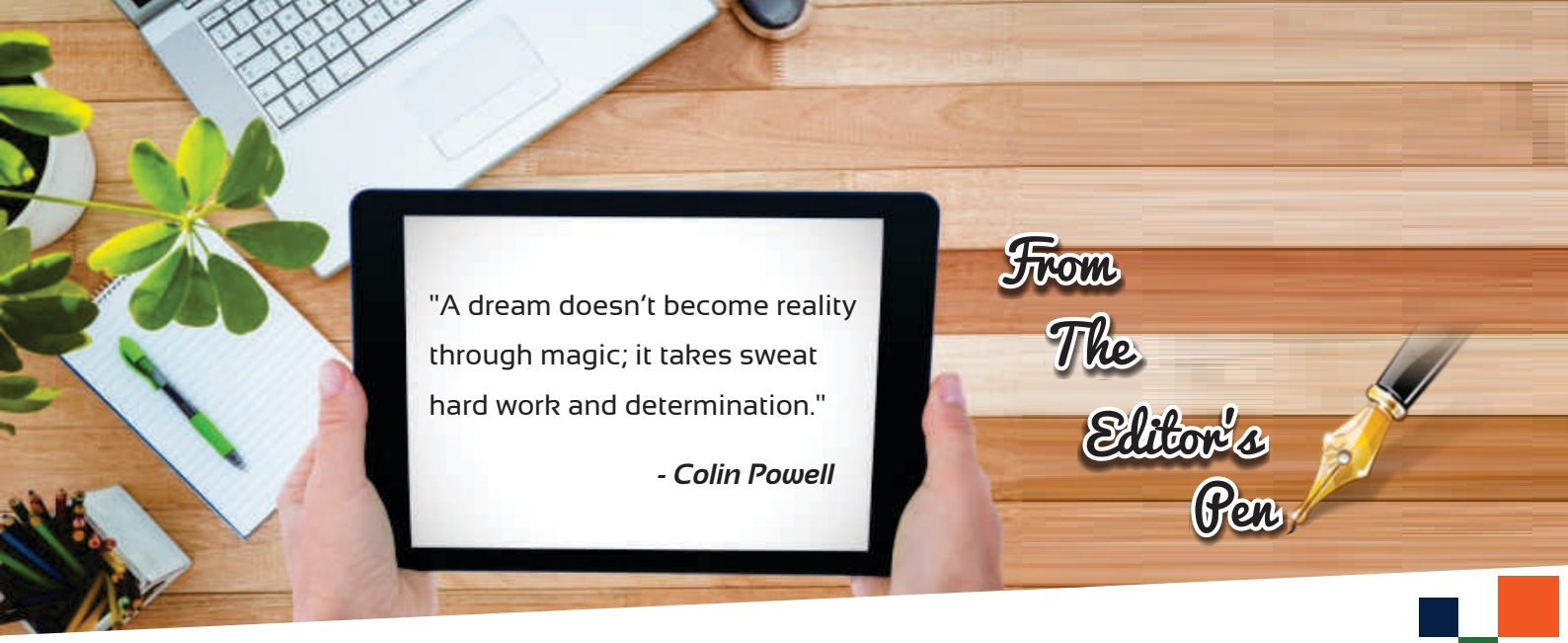
All the collective hard work by the entire team is constantly reflected in the growth of the hospital. Pushing the boundaries of perfection has become the norm for our team and we shall continue to do in the future. We have nearly completed our second phase of construction and shall be housing the Bone marrow transplant unit, organ transplant unit, SPECT & PET scans and the neutronpenic ICU in the same building.

My dream project "Uyirin Swasam" has been initiated and I hope that the next 2 years, we are able to plant 2,00,00,000 trees in the 2 districts and the future generation benefits from this venture.

Regards

Dr. K. Madeswaran

Founder Chairman



From The Editor's Pen

Royal Care

In this edition, we have showcased our achievements in the last 3 months. The major event being our one year anniversary followed by a national level conference "Broncocon 2018". We have also discussed few interesting clinical cases.

First year anniversary of the hospital was celebrated with Solvendar Sugi Sivam as Chief guest where he spoke on the current problems faced in health for individuals and the industry on the whole. It was attended by well over 2000 people and our loyal clients were given health insurance policies from the hospital fund as a first of its kind initiative.

BRONCOCON 2018, a national level conference was conducted by the interventional pulmonologist in association with the hospital, which was a major success with its hands on training and virtual reality interface. The pulmonology team deserves a major applause for this immense achievement in a hospital which has been functioning for just one year.

We have a few articles on urology, orthopaedics and unique cases done in cardiothoracic surgery. The ever-growing complexity of cases has prompted a surge in investment on latest equipments enpar with the western world.

We welcome the new doctors to our ever growing team and wish them a grand success in all their clinical endeavors in our hospital. We also congratulate our spine surgeon Dr. Sudhakaran for receiving the prestigious award for Medical Excellence & Vijay Rattan Gold Medal in New Delhi.

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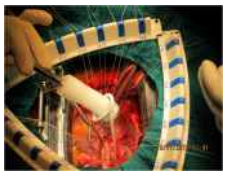
ABOUT - FACE OF A PAST MIDDLE AGED MAN

Dr. Krishna Kishor, MS, DNB (CTVS)
Consultant Cardiothoracic Surgeon

Dr. Balaji. D, MS, M.Ch (CTVS)
Junior Consultant Cardiothoracic Surgeon



Mitral Regurgitation is a well-documented Mechanical complication due to ischaemia with an incidence of 10-15% , most commonly due to Acute Myocardial infarction out of this 3-5% have secure Mitral regurgitation. These group of patients falls under Type II of carpentier classification.

Most common cause is due to papillary muscle rupture which accounts for about 1-5% of cases. In their postero medial muscle is more common than Anterolateral (75:25%). If left unoperated Mortality accounts to about 8.6%. Mortality is high despite corrective surgery and prognosis is bad in the acute period. Risk factors for this dreadful complication are female gender, advancing age, previous MI, multivessel diseaseand size of the infarct.

Mr J 55 years presented with dyspnoea and chest pain to our hospital. On examination, he was tachypnoeic with elevated jugular venous pressure and bilateral pitting edema and a grade of 4/6 systolic murmur at the apex. ECG showed left ventricular hypertrophy with left bundle branch block. Chest x ray revealed cardiomegaly with congested lung fields. Echo revealed severe global hypokinesia with EF of 15% and severe mitral regurgitation with moderate PAH. Biochemical parameters were within normal limits. He had poor hemodynamics needing inotropic support and ICU care.

His heart failure was managed medically prior to further investigation and his EF improved to 20% , he was taken up for coronary angiogram, which revealed triple vessel disease and needed grafts to LAD, RAMUS and RCA and attention to mitral valve. The plan of action was coronary artery bypass grafting with mitral valve replacement. Invasive lines viz., a radial arterial line, IJV line with a triple lumen catheter and an additional femoral arterial line for insertion of IABP catheter if needed were secured.

After standard midline sternotomy, peri cardiotomy revealed a dilated heart and scarred inferior wall . Left Internal Mammary Artery (LIMA) and great saphenous vein were harvested. Standard cardiopulmonary bypass was instituted with bicaval venous and ascending aortic cannulation. Blood cardioplegia was delivered antegrade through aortic root and retrograde through coronary sinus to arrest the heart. Core was cooled down to 28c. LIMA was anastamosed to LAD after endarterectomy, subsequently grafting of Saphenous venous graft (SVG) to RAMUS was done after endarterectomy and distal RCA was grafted. Subsequent doses of cardiolegia were delivered through grafts and aortic root.

Mitral valve was approached through right atrium and inter atrial septum. Mitral valve leaflets were thinned out and chordal rupture of Anterior mitral leaflet was noted. Native valve was plicated and replaced with 27 mm mechanical valve (TTK chitra) . Inter atrial septum and right atrium were closed subsequently. Heart was declamped, Proximal anastamosis were done on partial clamp.

Standard weaning procedure was carried out after complete deairing of the heart. IABP was inserted electively during weaning. Patient was shifted to ICU oninotropic support with stable hemo dynamics. He was extubated in 8 hrs time and inotropes were weaned off in 24 hrs a IABP on day two postoperatively and shifted to ward and discharged on day five

Discussion :

The published reports worldwide for this disease has a documented mortality of 19% where as ours is very negligible . To date, we have done about 48 cases with 4% mortality. Surgery in the acute setting is risky and technically challenging. Detection and early intervention yields good results. Retaining the subvalvar apparatus prevents LV dilatation and preserves LV function. Elective IABP optimizes hemodynamics and better myocardial perfusion . Our patients are on regular follow up with significant improvement in global left ventricluar function, dimensions and in functional class I - II.

HEMANGIOPERICYTOMA – A RARE MALIGNANT NEOPLASM OF PROSTATE (CASE SERIES)

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Abstract:

Hemangiopericytoma is a very rare neoplasm of the pericytes, of capillaries. Especially haemangiopericytoma of prostate is a relatively rare entity, characterized by uncontrolled proliferation of pericytes of prostatic blood vessels. Being represented only by 2% to 3% of all soft tissue sarcomas in humans, they usually occur in 4th and 5th decades of life. Aggressive surgical management followed by adjuvant chemo-radiation has been proven to be treatment of choice. Worldwide only very few cases have been reported.

Here-in, we report 2 cases of primary haemangiopericytoma of prostate (over a period of 10 years), presenting itself like benign prostatic disease initially, resulting in acute retention of urine. In both cases Serum Prostate Specific Antigen (S.PSA) and CEA were found to be normal. Hence, both patients underwent trans-urethral resection of prostate, but histopathology with IHC turned out to be primary hemangiopericytoma of prostate. Further evaluation with CT and MRI showed large heterogenous masses in the pelvis, with bladder involvement. Prostatic tissue was not separately made out. One patient underwent aggressive radical surgery alone, was asymptomatic for 36 months, later developed local recurrence and succumbed to the disease. Other patient underwent aggressive radical surgery followed by adjuvant chemo-RT. On follow-up, patient is doing well without any recurrence or distant metastasis.

To conclude aggressive surgical management with adjuvant chemo-RT for haemangiopericytoma of prostate, followed by good follow-up is an effective and viable treatment protocol.

Keywords: Hemangiopericytoma, prostate, carcinoma, treatment, IHC

Introduction:

Hemangiopericytoma is a very rare neoplasm of the pericytes, of capillaries(1). Especially haemangiopericytoma of prostate is a relatively rare entity, characterized by uncontrolled proliferation of pericytes of prostatic blood vessels. Being represented only by 2% to 3% of all soft tissue sarcomas in humans, they usually occur in 4th and 5th decades of life . Microscopically, the these tumours shows features of tightly packed cellular areas surrounding thin-walled branching blood vessels. Aggressive surgical management followed by adjuvant chemo-radiation has been proven to be treatment of choice. Worldwide only very few cases of haemangiopericytoma of prostate have been reported.

Here - in we report 2 cases of haemangio pericytoma of prostate which were managed with aggressive surgical management, followed by chemo-RT.

Case Descriptions:

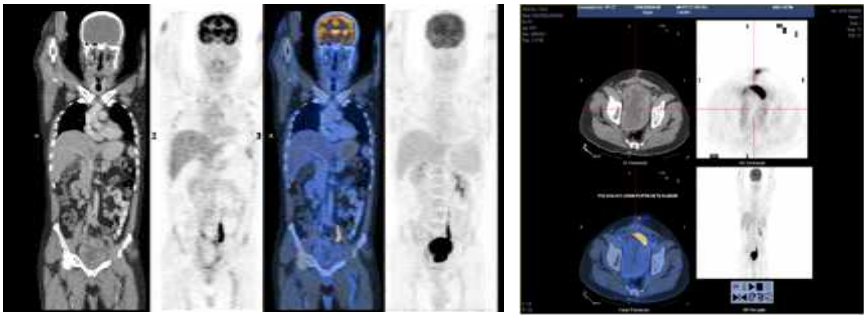
Case 1:

A 62 year old male patient with no known co-morbidities, presented with LUTS, followed by acute retention of urine. DRE showed grade 3, hard, prostatic enlargement. Routine investigations, along with S.PSA and CEA were within normal limits. Hence, a TURP was done. Histopathology with IHC turned out to be hemangiopericytoma of prostate. CECT of abdomen and pelvis revealed a 9x9x7cm heterogeneously enhancing soft tissue lesion, posterior and inferior to urinary bladder, that could not be separately seen from the prostate. MRI of pelvis, confirmed a well encapsulated heterogeneous, highly vascular lesion involving the prostate with infiltration into the anterior rectal wall.

Patient underwent exploratory laparotomy, which revealed a large, highly vascular mass lesion, in the region of the prostate, adherent to the anterior rectal wall, pushing the bladder antero-superiorly. Lesion was completely mobilized. Pelvic exenteration was done and the prostatic lesion was completely removed along with bladder, seminal vesicle and adherent rectum. Urinary and faecal diversions were made, using a single double barrel sigmoid colostomy. Histopathology examination showed tumour cells composed of ovoid to spindle shaped cells, arranged in irregular lobules, around a ramifying network of thin walled vascular channels, with variable mitotic activity. IHC was positive for Factor XIIIa related antigen and CD34, suggestive of Hemangiopericytoma.

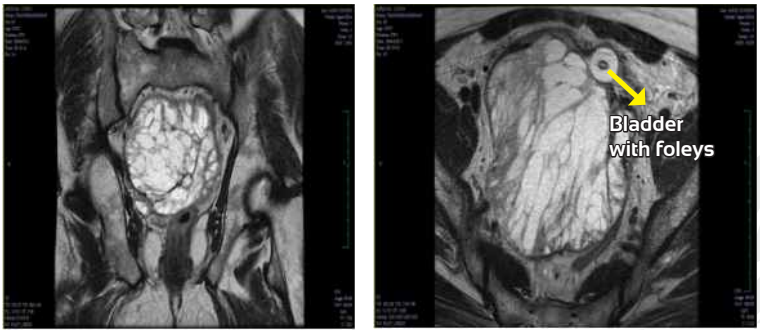
Case 2 :

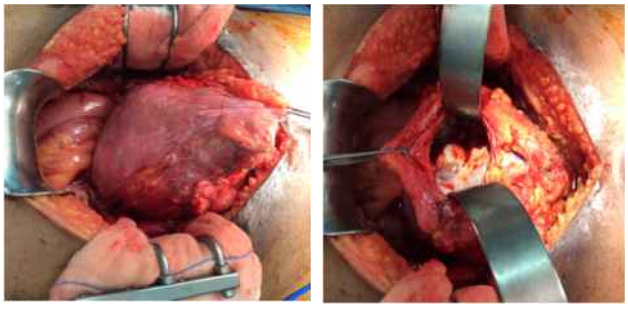
A 58 year old male patient, who presented elsewhere with history of multiple episodes of urinary retention. Trans-rectal ultrasound done showed large volume prostate, with variable cystic lesion. S.PSA (0.821ng/dl) and CEA were within normal limits. He had undergone TURP. HPE was suggestive of Prostatic stromal sarcoma with focal adenocarcinoma of prostate, Gleasons score 6. Wholebody skeletal survey, did not suggest any skeletal metastasis. CECT showed large prostate (561cc) with completely distorted anatomy, with areas of hypodensities within the lesion. Slide review at our institution showed evidence of Prostatic adenocarcinoma (gleasons 4+3=7) with sarcomatoid component. IHC was positive for CD-34 and vimentin, negative for desmin and cytokeratin. 2 cycles of neo-adjuvant chemotherapy with ifosfamide and Adriamycin was given, along with Inj.Leuprolide. Re-assessment with PET CT, showed progression of disease. In view of disease progression, second line chemotherapy with gemcitabine and docetaxel was given. Patient changed to SPC, due to catheter related symptoms. Patient later developed DVT of right lower limb, which was managed with warfarin. Re-evaluation with MRI abdomen and pelvis showed disease progression with loss of fat planes between the mass and bladder, rectum and sigmoid colon. Prostate and seminal vesicles were not separately seen. Later patient developed haematuria and became symptomatic. In view of poor response to chemotherapy and haematuria, he underwent cysto-prostatectomy with B/L Pelvic lymph node dissection with ileal conduit diversion (Intra-operatively a plane between rectum and tumour was obtained). HPE showed Neoplasm composed of cells arranged in diffuse sheets and also around thin walled ectatic vascular channels, with involvement of both seminal vesicles along with base of bladder. All lymphnodes showed, only reactive hyperplasia, without any evidence of metastasis. IHC was Positive for SMA and CD34 and negative for CD31, cytokeratin and PSA, suggestive of hemangiopericytoma.



PET Scan Images of Case 2, showing FDG non-Avid lesion of prostate with involvement into seminal vesicles, posterior wall of bladder and sigmoid colon.

MRI Images of Case 2: 12 (AP) x 8 (TR) x 10 (CC) cm heterogeneously enhancing lesion noted in the pelvis which is compressing the bladder anteriorly with loss of fat plane between posterior wall of bladder, rectum and sigmoid colon. Prostate and seminal vesicles are not seen separately. Multiple large bilateral inguinal and external iliac nodes noted (Left >Right).





Intra-operative Pictures.
Underwent Cysto-prostatectomy + B/L PNLD + Ileal conduit diversion.

Discussion:

Hemangiopericytoma being first described in 1942 by Stout and Murray, is an unusual perivascular tumour. Charecterised by uncontrolled proliferation of pericytes, represents 2% to 3% of all soft tissue sarcomas in humans. Usually occurs in the 4th and 5th decades of life (1). Common sites of presentation are soft tissues of lower extremities, pelvis and retroperitoneum. Rare presentations occurs in bones of pelvis, proximal femur, vertebrae or humerus. Involvement of genito-urinary system is very rare(eg. Kidney, bladder, prostate and spermatic cord) (2 – 4).

Hemangiopericytoma of prostate usually presents initially as painless mass, later followed by haematuria, frequency of micturition and lower urinary tract obstruction, as disease progresses (2). Macroscopically, the tumour is soft and rubbery. Microscopically, characterized with tightly packed small spindle shaped cells, surrounding thin walled branching blood vessels. Micro scopically, benign and malignant forms are distinguishable(3). Malignant forms are characterized by increased cellularity, prominent mitotic activity and focal areas of necrosis or hemorrhage (1).

Differential diagnosis to be kept in mind are Malignant fibrous histiocytoma, Malignant peripheral nerve sheath tumours and Sarcomatoid carcinoma (carcinosarcoma).

Diagnosis is mainly by immuno-histochemistry. Tumour cells usually show positivity for Factor XIIIa antigen, vimentin, CD 34 and HLA-DR antigens. Shows negativity for Factor VIII related antigen, desmin, CD 31, myoglobin, low and high molecular weight cytokeratin.

Indicators of poor prognosis are increased cellularity, presence of necrosis and hemorrhage, increased mitotic figures exceeding 4/10 HPF (4). Metastasis occurs usually to lungs or bones. Lymph nodal metastasis is uncommon. Tumour spread is mainly haematogenous (6). Invasion of adjacent structures like bladder and rectum has been reported. Usually local recurrence precedes metastasis, in more than 2/3 of cases. It has been reported in literature than overall 10 year survival is 70% and 5 year overall survival in microscopically dysplastic cases is <50%.

Finally management of these cases is primarily surgical. Complete aggressive surgical excision is at present the recommended primary treatment for these aggressive tumours. Complete resectability is considered the single most important determinant of clinical outcome (5).

Some studies have attempted treating these patients with TURP alone, but these patients on long term follow-up, were found to have developed local recurrence (50%) and/ or metastasis to lungs and had succumbed to the disease.

Role of adjuvant treatment is poorly defined in literature. But considering the aggressive nature of the disease, in order to reduce the risk of local recurrence and distant metastasis, adjuvant treatment options with Chemotherapy and Radiotherapy are being attempted, with limited success.

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ACUTE MI WITH CARDIOGENIC SHOCK

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Dr. R. Chandramohan, MD, DM
Consultant Interventional Cardiologist

Case summary of patient who presented to royal care in december 2017

52 year male nondiabetic, nonhypertensive, smoker had chest pain with giddiness at 3 am . Diagnosed as Acute IWMI with BP of 100/60 mm Hg. Referred for further management in ambulance from Avinashi. Five minutes before reaching Royalcare Neelambur he became unresponsive. Reached ER at 3:30 am in unresponsive state, cold and clammy peripheries . ECG monitor showed ventricular fibrillation. CPR started immediately in Emergency department as per ACLS protocol. Non synchronised DC shock given 5 times but patient had refractory VF. Patient intubated and Inj Cardarone IV bolus given but no response. Inj Lignocaine bolus given and again defibrillated. Patient reverted to junctional rythm with broad QRS complexes after 25 minutes of CPR. His BP was 60 systolic. Echo showed Inferior and lateral wall hypokinesia with moderate Mitral regurgitation. RV contracting well. Ionotropes and IV fluids given, he developed Pulmonary congestion with wheeze and crepitations after IV fluid bolus. BP did not improve even after Noradrenaline and dopamine infusion. He had recurrent Nonsustained VT. Discussed with attenders regarding need for primary PCI as he had electrical instability and mechanical complication due to ischemic Mitral regurgitation. Shifted to cath lab within 20 minutes of ROSC (return of spontaneous circulation) with ventilator support.

CAG showed Single vessel disease of Circumflex artery(total occlusion). Thrombosuction and stenting to LCX done with 3.5*28 mm Drug eluting stent. Immediate postprocedure Echo showed mild MR. No further VT/VF. Hypothermia initiated immediately after shifting to ICU as per protocol due to resuscitated cardiac arrest. Patient regained consciousness next day with no neurological deficit. He had ischemic hepatitis, mild renal dysfunction (Cr 1.8 mg/dl). Ionotropes tapered and stopped on day 2 of MI. Extubated on day 2. Patient had undisplaced rib fractures which was managed conservatively. Shifted to room on day 4 and discharged on day 6 in stable condition. His creatinine improved to 1.2 mg/dl at discharge.

This case illustrates the importance of early revascularisation in acute MI with cardiogenic shock. Once shock is diagnosed, the mortality rate remains high (≈50%) despite intervention, and half of the deaths occur within the first 48 hours.This may be caused by irreversible extensive myocardial or vital-organ damage. Since the strategy of early revascularization is always superior to initial aggressive medical therapy we went ahead with invasive management. Patient recovered without neurological damage. His LV function normalised and he is back to his routine activities in 3 weeks.

Learning points :

Mechanism of cardiogenic shock in IWMI is not always due to RV infarction but can be due to ischemic MR. Treatment vary and echo correlation is important for guiding treatment. Multi disciplinary team approach is essential in management of resuscitated cardiac arrest. Early revascularisation is the key to improved outcomes in patient with cardiogenic shock.

Although shock often develops early after MI onset, it is typically not diagnosed on hospital presentation. Some patients, particularly those with anterior MI, develop signs of end organ hypoperfusion in the setting of unsupported blood pressure measurements > 90 mm Hg. The urine output is typically low and the heart rate > 90 beats per minute. This "pre-shock" presentation is associated with a high risk of in-hospital morbidity and mortality (43%). Failure to recognise early haemodynamic compromise and the increased early use of hypotension inducing treatments may explain this observation.

In SHOCK trial, substantial minority (28%) presented with evidence of hypoperfusion in the absence of pulmonary congestion—the "silent lung" syndrome. These latter patients have an equal distribution of anterior (50%) and non-anterior index infarctions (50%) with pulmonary capillary wedge pressure in the range of 21.5±6.7 mm Hg.

Clinical, Echocardiographic and haemodynamic correlation are important for risk stratification and better management in these subset of patients. Round the clock cath lab team with short door to balloon time and our expertise in managing sick patients are the key for better outcomes

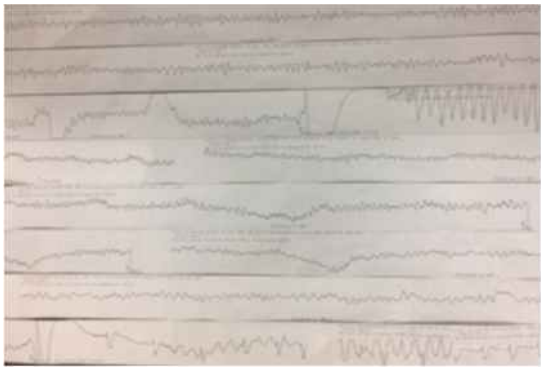


Fig 1: ECG strip from defibrillator showing VF junctional rhythm at end indicating ROSC. ECG strip taken intermittently during CPR

In the randomized SHOCK trial, a strategy of early revascularization resulted in 132 lives saved at 1 year per 1000 patients treated as compared with initial medical therapy followed by no or late revascularization as clinically determined. This magnitude of benefit is comparable to that of CABG versus medical therapy for patients with left main coronary stenoses

Fig 2: CAG showed total occlusion of LCX.

After stenting

Key Points

- Early recognition of shock is essential.
- Eventhough mortality is high early angioplasty is the treatment of choice.
- Understanding mechanism of cardiogenic shock is essential.
- Frequent echocardiogram is required to guide treatment.
- Multi-disciplinary team is required to manage these complex patients.
- Initiation of ACE inhibitors and beta blockers in patients with pre-shock condition can be dangerous.

Congratulation ! !

DR. SUDHAKARAN MANICKAM

MBBS, MS(ortho), DNB (ortho), MNAMS, MRCS (Edinburgh), FNB (spine surgery)

Consultant Orthopaedic Spine Surgeon

Receiving the award for Medical Excellence & Vijay Rattan Gold Medal at New Delhi

GLIMPSES

Releasing of Royal Care - Journal

Free Insurance Policy to the patients treated at RCH

Inauguration of Medical Expo 2018

Broncocon 2018

Broncocon 2018

Medical Camp @ Palakad

GLIMPSES

Class on Infection control

Mock Drill

Fire and Safety class

Chairman in Action –
Inter Department Cricket Match

Cultural Program

Republic Day Celebrations

Cultural Program

INTERVENTIONAL RADIOLOGY

Dr. Madan Mohan
MD (Radiology), PDCC (Neuroradiology), Fellowship in Interventional Neuroradiology
Consultant Interventional Radiologist

Microwave ablation for Liver Tumors

We are proud to announce the successful performance of 'Microwave ablation' on three patients with Hepatocellular carcinoma (Liver cancer) for the first time in Coimbatore and in whole of Western Tamilnadu. Microwave ablation (MWA) is a new non-surgical Minimally-Invasive technique for the treatment of cancers of the Liver. This is performed as a curative treatment procedure on patients with Hepatocellular carcinoma (HCC) who are poor surgical candidates.

In this article, we present the details of one of the patient who was cured of HCC by MWA therapy.

In addition, we also present cases in neurovascular, peripheral vascular and non-vascular interventions.

Case - 1

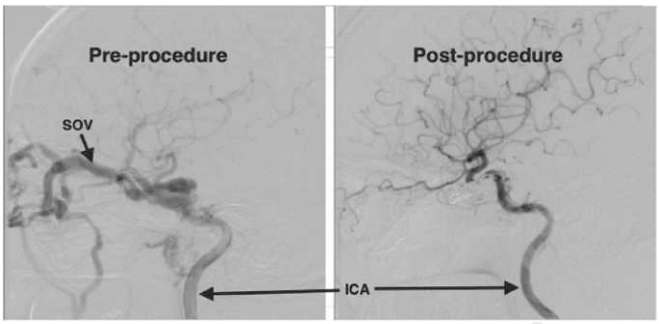
A 70 year old male patient, a case of Cirrhosis of liver on routine surveillance presented with elevated Serum Alpha-fetoprotein (AFP) values. Contrast CT abdomen revealed a 3.5 cm sized hepatocellular carcinoma in the right lobe of liver. As the patient was not a surgical candidate, he was offered the treatment of Microwave ablation. Microwave ablation was done using CT and USG guidance. Follow-up CT 1 month later revealed complete disappearance of the mass with no residual lesion.

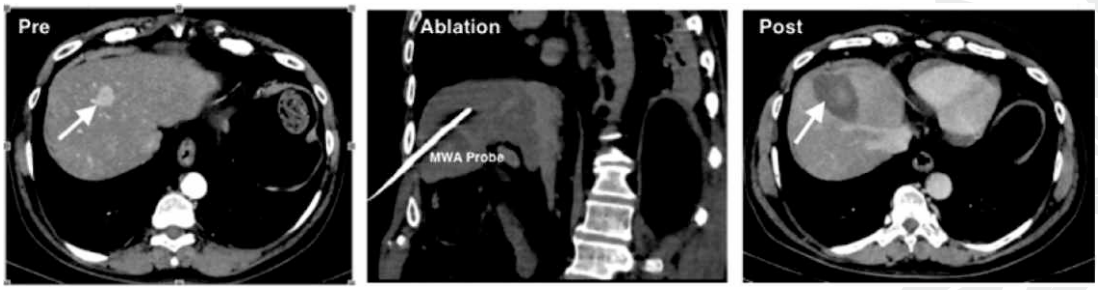
Carotid cavernous fistula - Coil embolisation

Case - 2

A 53 year old female who had a recent history of road traffic accident and head injury presented with severe proptosis of her right eye associated with conjunctival congestion. MRI Brain with MR angiography revealed a Direct Post-traumatic Carotid-cavernous fistula(CCF) involving the right internal carotid artery.

DSA revealed the CCF and the dilated superior ophthalmic vein (SOV, responsible for the proptosis and conjunctival congestion). Coiling of the CCF was done using balloon assistance. Post procedure angiogram revealed no filling of the SOV. The proptosis and conjunctival congestion resolved. Clinical follow-up at 6 months revealed complete resolution of symptoms with no recurrence.



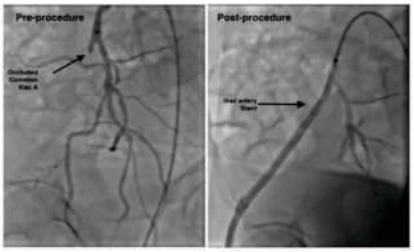


Peripheral vascular disease - Angioplasty and stenting -

Case - 1

A 62 year old male presented with history of worsening right lower limb claudication of 1 year duration. Pain was felt on walking a distance of 100 meters. On clinical evaluation the arterial pulses in the right lower limb were feeble. A CT angiogram revealed complete occlusion of the right Common iliac artery (Chronic total occlusion).

Conventional angiography followed by angioplasty and stenting of the right Common iliac artery was performed. The patient claudication pain gradually improved over the next few days.

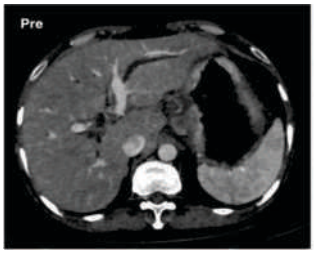


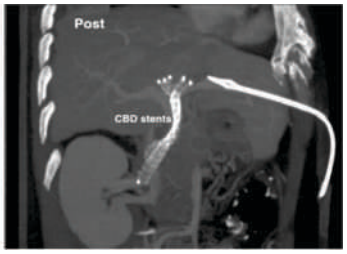
Percutaneous transhepatic biliary drainage (PTBD) with Antegrade biliary stenting

Case - 2

A 65 year old male patient who was a known case of Metastatic Carcinoma Stomach presented with worsening jaundice. Biochemical evaluation elevated direct bilirubin. USG and subsequently CT revealed tumor infiltrating the upper CBD, involving the hilar confluence. The intrahepatic bile ducts were dilated.

The patient was taken up for PTBD and Palliative stenting. PTBD was done on both right and left lobes and the hilar stricture crossed. Metallic stenting placed from both systems in a Y-shaped fashion. The patient's serum Bilirubin levels normalised over the next couple of weeks.





UYIRIN SWASAM

Uyirin Swasam is more than a community project which focus on planting trees and thereby making the environment clean and greener by balancing air pollution and preventing the ozone layer from further damages. It's a dream project by **Dr.K.Madeswaran,** Chairman & Consultant Neuro and Spine Surgeon. His vision and thoughts formed **"Uyirin Swasam"** - planting **2,00,00,000 trees by 2020** in two districts (erstwhile Coimbatore & Tirupur district, c overing Erode also). In the first phase, planting trees on the L & T Road from Neelambur to Madukkarai has been started. By December 2019, approximately 1.25 crore saplings will be planted.

It's not a project of planting the saplings merely for the sake of just creating a flutter in the society. His vision, in depth involvement and own "swasam" formed the idea and ensuring him that the saplings are looked after and protected for survival. While selecting the saplings, his thought is to have all varieties of saplings which can grow and give shade, attract birds, yield fruits.

2022
ஆம் ஆண்டிற்குள்...
2 கோடி மரங்கள்
மாவட்டங்களில்
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சித்தோடு

SINGLE INCISION LAPAROSCOPY IN GYNAEC SURGERIES

Dr. S. Kalyanakumari MS (O&G), Dip. Gyn, Endoscopy (Germany), MBA (HA)
Consultant Gynaecologist & Laparoscopic Surgeon

Single incision laparoscopic surgery is a very exciting new modality in the field of minimal access surgery which works for further reducing the scars of standard laparoscopy and towards scar less surgery.

Single incision laparoscopy is not new. It has been around for more than 30 years. Gynaecologists were doing tubal ligation with the single puncture laparoscopy since late 70s. This technique works well for all gynaecological surgery as the Uterus can be manipulated from below. These early instruments had offset eye pieces with a straight operating channel through which an applicator for the silicone ring to occlude the tubes could be passed, vaginal manipulation of the uterus obviated the need for retraction.

The advantages of using a second instrument with triangulation were noted at the time. The use of multiple trocars rapidly gained popularity over single puncture. As conventional laparoscopy became popular even for complex procedures in surgery, it was usually carried out through four or more ports. Increasing the number of ports led to reduced cosmosis, more pain, port site infection and hernia. One advantage of reducing number of ports over cosmosis would be to reduce these complications. The minimal access surgery has come a full circle with the single incision surgery gaining popularity once again.

In the past there were many limitations for using single incision approach including limited instrumentation, lighting and access ports. In recent years however improvements in traditional laparoscopic techniques and availability of more advanced instruments has made single incision laparoscopy more safe and feasible for the patient.

There are three approaches in completing laparoscopic surgery via a single incision.

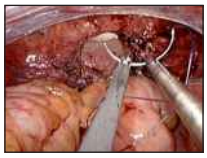
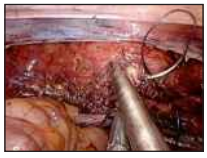
The first is to employ an operative laparoscope usually for tubal ligation. These operative laparoscope has a channel along the scope shaft allows the entry of bipolar cautery to carry out coagulation of fallopian tube.

The second is to make single incision in the skin and multiple incisions in the fascia, With this approach multiple 5 to 10mm trocars are inserted next to each other to access abdominal cavity.








Third is to use specialized access ports with multiple channels for access to abdominal cavity.

Eg:- Air seal port, Ethicon endosurgery SSL access system , Gelport and Gelpoint system , SILS port, Tri port and quad port X cone and end cone. But the main disadvantage with these special access ports is the cost.

Technical challenges:

The most common technical challenges that may be encountered in single port surgeries include Instruments crowding . Crowding of the instruments inserted through single port leading to limitation of movements because of the close proximity of the instruments.

Loss of the triangulation - This is due to accommodating both the camera and instruments through single incision.

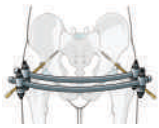
Long learning curve. The learning curve is longer compared to traditional multiple laparoscope.

In our center will use conventional re useable ports through single incision made in the umbilicus .10 mm camera port is made along with two 5mm working ports. Use of conventional ports is really cost effective.

We perform single incision surgery for removing uterus upto 18 weeks size, myomas upto 8cm, and ovarian cysts. Eventhough presence of previous caesarean section scar, multiple myomas and uterus more than 10 weeks size are relative contradictions for the single incision laparoscopy according to text books it is possible to perform these surgeries with experience and expertise.

According to the results of recent cocharane review the laparoscopy shown to be superior to laparotomy in terms of speedier return to normal activities lower intra operative blood loss , a smaller drop in hemoglobin level, short hospital stay and fewer wound and abdominal wall infection. In addition, laparoscopic surgery for hysterectomy has been found to be cost effective as the shorter hospital stay and lower morbidity offset the initial cost of the procedure.

In addition to this single incision laparoscopic surgeries performed through 2 cm incision hidden in the umbilicus has clear cosmetic benefits especially in young females.



ANTERIOR INTRA PELVIC APPROACH : A PANORAMIC VIEW TO COMPLEX ACETABULUM AND PELVIC FIXATION

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Background:

Complex acetabular and pelvic fractures are challenging to treat as they require multiple simultaneous or sequential surgical approaches that demand surgical expertise with steep learning curve and high morbidity due to associated potential complications (1,2). Anterior intrapelvic approach (AIP) or modified stoppa approach provides panoramic view to entire pelvis and could be utilised as a stand-alone approach for complex pelvic and acetabular fractures. We report a case treated with a single approach for transverse fracture with posterior column displacement with associated anterior and posterior pelvic ring injury using AIP approach (3).

Patients and methods:

A 32 year male met with road traffic accident sustained Transverse acetabulum fracture with posterior column displacement right side, symphysis diastasis more than 4 cm, displaced left suprapubic ramus fracture and complete disruption of left sacroiliac joint with left distal third humerus fracture and facial lacerations. He was hemodynamically stable, negative for head injury and visceral organ injuries. He was immobilised with pelvic binder, underwent MIPO of left humerus and repair of facial lacerations immediately. On day 3, he underwent pelvic and acetabular fracture fixation.

Preoperative CT with 3D reconstruction performed, plating on bone model simulated. Patient placed supine, pfannenstiel skin incision made anteriorly 2cm superior to pubic ramii, subcutaneous tissue dissected, Rectus split in the midline, rectus muscle insertion avulsion seen on both sides, corona mortis artery lighted on left side, pectineus and iliopectineal fascia dissected under femoral vessels and vessels retracted. Superior pubic ramus fracture reduced and fixed using 5 5 x 3.5mm AO screw by retrograde technique. Then right side corona mortis artery lighted,pectineus and iliopectineal fascia dissected,femoral vessels retracted, iliacus muscle dissected subperiosteally, pelvic brim exposed upto anterior sacroiliac joint, obturator nerve exposed and preserved. Now the transverse fracture line noted clearly from anterior to posterior column. The fracture reduced by indirect technique using underbent 5 hole 3.5 mm straight Matta plate placed infra pectineally along the pelvic brim in compression mode using two cortical screws proximally. Next, pubic symphysis reduced and fixed with 3.5 mm AO locking symphysis plate with 2 screws on either side, rectus then reattached and wound closed in layers over a drain. Patient in same position SI joint on left side was reduced by longitudinal traction and percutaneous ball spike and fixed percutaneously using 2x6.5 mm titanium cancellous screws. Patient transfused 2 packs of blood. The drain removed in 24 hours, two doses of antibiotics given postoperatively. He was able to perform ankle pump exercises, quads and SLR by day 3. Mobilised to sitting position on day 3. Discharged home on day 10 without any complications.

Discussion:

Commonly, transverse / T type / bicolumn fractures with posterior column displacement and pelvic ring fractures are treated using more than one approach using posterior Kocher Langhenbeck and ilioinguinal or anterior intrapelvic approach with need for single or two stage placing the patient in lateral decubitus for posterior approach and supine for anterior approach prolonging the operative time and morbidity to the patient. The posterior approach commonly used first to reduce the posterior column using the column concept (2,3). Then subsequent approaches if anterior column is

displaced or associated pelvic injuries are present. In our case,the fracture was studied in terms of its superomedial vector displacement(5). Hence we decided to reduce and buttress the pelvic brim instead of posterior or anterior column by single AIP or modified stoppa approach, which provides a panoramic view of either side pelvis through small shutter of 10cm thereby addressing the anterior pelvic injury in the same sitting decreasing the operative time and associated morbidity. The AIP approach facilitates the screw trajectory that avoids the intraarticular inadvertent penetration and also improves the ease of fluoroscopy as the patient is placed supine. It also decreases the incidences of vascular thrombosis and lymphedema as the dissection is below the vessels than directly on to the vessel as in ilioinguinal approach. The potential complication of the approach includes bleeding from corona mortis, femoral artery and obturator nerve injury, and bladder injury.

Conclusion :

AIP or modified stoppa approach can be considered as a utility approach with ability to provide panoramic view for addressing complex fractures involving both column of acetabulum without posterior wall involvement and pelvic injuries as stand alone in most of the situation.

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5. Amir Herman.There is no column:a new classification for acetabular fractures JBJS Am.2018 Jan;100:e8(1-10)

Left suprapubic rami fixation Intra op

Right bicolumn fracture fixation Intra op

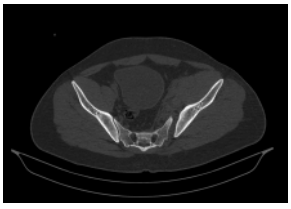
Symphysis pubis fixation Intra op

Left SI Pecutaneous fixation Intra op

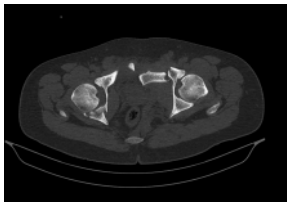
Preop 3D CT

Preop Radiograph

Post op pelvis outlet view



Preop CT showing Left SI joint disruption



Preop CT showing right both column fracture,pubic diastasis and Left superior pubic rami fracture

Postop inlet AP and inlet view

RELEASING OF SOUVENIR AT THE INAUGURAL FUNCTION OF BRONCOCON 2018

L - R : **Dr. Arjun Srinivasan, Dr. Pratibha Singhal** (Hon. Secretary, Indian Association for Bronchology) **Dr. K. B. Gupta** (President Indian Association for Bronchology) **Chief Guest - Prof. Randeep Guleria** (Director - All India Institute of Medical Sciences, AIIMS, New Delhi) **Dr. K. Madeswaran** (Chairman - Royal Care Hospital), **Dr. V.R. Pattabi Raman** & **Dr. S. Mahadevan**

BRONCOCON 2018

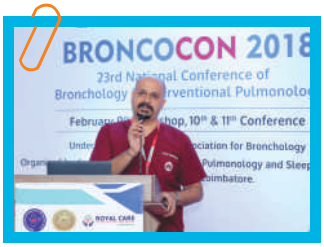
The department of Pulmonary Medicine, Royal Care Hospital, Coimbatore in association with the Indian Association for Bronchology, hosted the National Conference of Bronchology and Interventional Pulmonology, "BRONCOCON 2018" at Royal Care hospital & Le Meridien, Coimbatore, for 3 days from 9th February 2018 to 11th February 2018. Dr. Randeep Guleria, a leading Pulmonologist himself and the Director of All India Institute of Medical Sciences (AIIMS) presided as the Chief Guest and Dr. K. Madeswaran, Chairman, Royal Care Super Speciality Hospitals, Coimbatore presided as the guest of honor.

During this conference around 100 top notch National and International medical experts in Interventional Pulmonology imparted training and educated over 600 doctors on the latest developments in this field. The conference included live workshops and interactive seminars organized over 3 days on close to 50 topics.

The hands on workshop was conducted on 9th February 2018 under expert faculty guidance with the help of specifically designed models for the delegates to simulate real time conditions. This was done in three batches so that the basic and advanced training may be imparted to the designated groups of doctors. The hands-on workshop was done at Royal Care Super Speciality Hospital, Neelambur.

The workshop and conference were a grand success and put the department of Pulmonology and Royal Care Hospital at an all new level as a sought after centre for medical excellence

Dr. V.R. Pattabi Raman
addressing the gathering



Dr.Arjun Srinivasan
addressing the Delegate about the hands on workshop

Hands on workshop

Royal Care Welcomes...

Dr. P. Velayutham, MD, DM (Endocrine), PGI Chandigarh
Consultant Endocrinologist & Diabetologist

Completed MBBS in 1997 from Tirunelveli Medical College. Has obtained MD (Internal Medicine) and DM(Endocrinology) from PGI, Chandigarh. Endocrinologist with vast clinical experience is practising in the speciality for more than 13 years. He has notable publications in national and international medical journal

Dr. Cheran Govalan, MBBS, MS (Gen Surg), M.Ch (Urology), FMAS, FILU
Consultant Urologist & Andrologist
(Laparoscopic & Renal Transplant Surgeon)

Completed MBBS in 2006 and MS (Gen Surgery) in 2011, both from Rajah Muthiah Medical College. He also holds M.Ch (Urology) from Amrita Institute of Medical Sciences, Kochi. He has obtained Fellowship in Minimal Access Surgery and 3D laparoscopic Urology.

Dr. Krishnamoorthy. T, MBBS.,MS
Consultant Ophthalmologist

Completed MBBS in 2010 from KAP Viswanathan Govt Medical College, Trichy and MS (Ophthal) in 2015 from Aravind Eye Hospital, Coimbatore. He worked as Consultant Ophthalmologist at Trinity Hospital , Palakkad before joning with Royal Care.

Dr.S. Meenakumari, DMRD, DNB
Consultant Radiologist

Completed MBBS in 2003 from Sri Siddartha Medical College Tumkur, DMRD in 2009 from Adichunchanagiri Institute of Medical Sciences and DNB (Radiology) in 2013 from Apollo Speciality Hospital.

Dr. Neelamma, MS, M. Ch (Plastic Surgery),
DNB (Plastic), Fellowship in Hand, Trauma Reconstruction and Microsurgery
Consultant Plastic and Cosmetic Surgeon

Completed MBBS in 2007 from Mahadevappa Rampore Medical Collge Gulbarga and MS (Gen Surg) in 2011 from Bangalore Medical College and Research Institute and also M.Ch (Plastic Surgery) and DNB (Plastic Surgery). She has also obtained Fellowship in Hand, Trauma Reconstruction and Microsurgery from Ganga Hospital.

Dr. Nachimuthu Kumar MD (Internal Medicine)
Consultant Internal Medicine

Completed MBBS in 2011 from Madras Medical College and Master's Degree in Internal Medicine in 2014 from PGI Chandigarh.

Royal Care Welcomes...

Dr. Parthiban. U MD (DVL)
Consultant Dermatologist & Cosmetologist

Completed MBBS in 2010 from JJM Medical College Davangere and has obtained Diploma in Dermatology from PSG Institute of Medical Science before his Master's Degree in Dermatology from Christian Medical College, Vellore.

Dr. Ravikumar. K, MS (GS), M.Ch (Endocrine Surgery)
Consultant Endocrine & Breast Surgeon

Completed MBBS in 2007 from Vinayaka Mission Medical College, MS (Gen Surgery) in 2012 from Madurai Medical College and M.Ch (Endocrine Surgery) in 2016 from Madras Medical College. Has operated more than 300 Thyroid gland and CA breast in his career.

Dr. A. Sandeep Chandrasekar, MS, M.Ch (SGE), DNB (SGE), FALS (Bariatric)
Consultant Surgical Gastro, Advanced Laparoscopic, HPB, GI Oncology and Bariatric Surgeon

Completed MBBS in 2005 from PSG Institute of Medical Sciences and Research Centre, MS (Gen Surg) in 2009 from Tanjore Medical College and M.Ch (Surgical Gastroenterology) from GB Pant Medical and Research Institute New Delhi. He has obtained DNB (Surgical Gastroenterology) and FALS on Bariatric Surgery besides HepatobilaryObservership from Seoul National University Bundang Hospital, South Korea.

Dr. P. Sampathkumar, MD, DNB (Radiology), PDCC (Cardiovascular Imaging and Vascular Intervention)
Consultant Interventional Radiologist

Completed MBBS in 2010 and MD (Radiology)in 2011, both from Madras Medical College and DNB in 2014 from KMCH. He has obtained PDCC (Cardio Vascular Imaging and Vascular Intervention) from Sri ChithraTirunal Institute of Medical Sciences, Trivandrum.

Dr. Senthilkumar. R, MBBS, MS (Gen Surg), M.Ch (Neuro)
Junior Consultant Neuro Surgeon

Completed MBBS in 2009 from Tirunelveli Medical College , MS (Gen Surg) in 2013 from Govt College Patiala and M.Ch (Nuero Surgery) in Aug 16 from Govt Medical College, Coimbatore. He has worked with Paras Hospital, Gurgoan before joining with Royal Care.

Dr. Venkateswarlu. M, MBBS, MD (Path), PDF Cytogenetics
Consultant Pathologist/Cytogenetics

Completed MBBS in 2007 from Mahatma Gandhi Medical College Pondichery and MD (Pathology) in 2012 from Govt Medical College, Kottayam. He has obtained Fellowship in Cytogentics from Tata Cancer Institute Kolkotta.

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