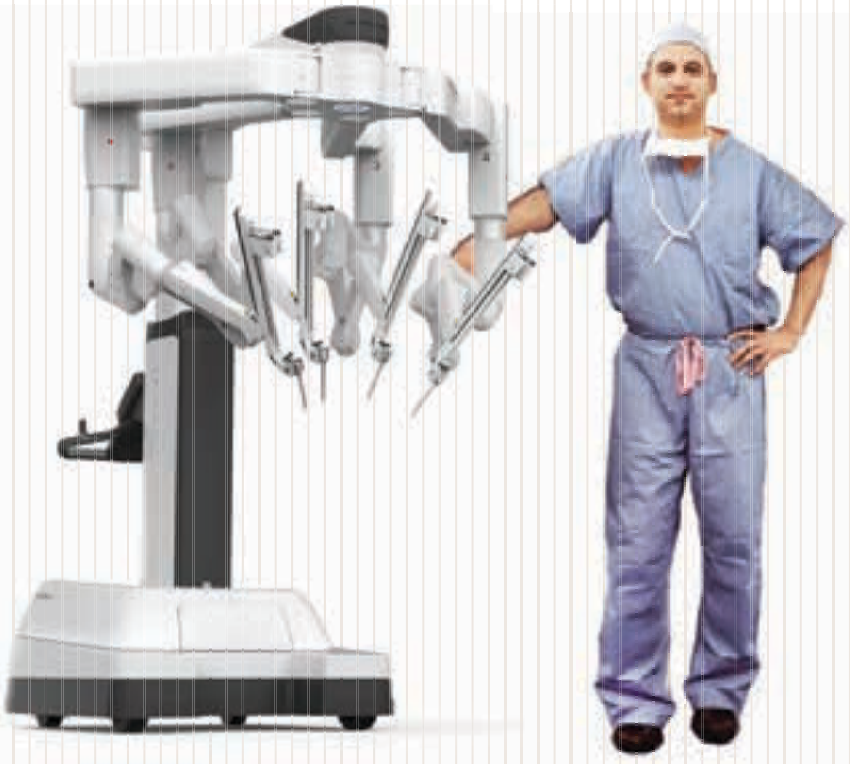
THE EDGE

Surgical Excellence through Advanced Robotics

Jan 2016

da Vinci® Surgery



Surgical Edge Surgery

From the CEO's Desk

Wishing a very Happy New Year to all of you involved with the fascinating field of Robotic Assisted Surgery!

Vattikuti Technologies achieved the distinction of earning the Gold Standard Excellence for da Vinci servicing for the Second consecutive year at the Distributors Annual Summit held in Japan on 4th and 5th November. This is just an official recognition of the appreciation that I hear from Hospitals and Doctors all over the country about the effectiveness and speed of service provided by our system support team. Kudos to them!

The last quarter saw the addition of da Vinci systems in major Hospitals in North and West India. Fortis Healthcare and Max Super Speciality Hospital in the NCR region and Jaslok Hospital in Mumbai became proud owners! With growth in the population of da Vinci systems and in order to service the surgeons and Hospitals better, we have added two new members to our Clinical Specialists team: Aditya Bidkar in Mumbai and Varun Luthra in Delhi.

I look forward to meeting the growing Surgeon community at the Robotic Surgeons Conference being held next in New Delhi on 8th and 9th April 2016!

Gopal Chakravarthy
CEO

Robotic Surgery - Media News

THE TIMES OF INDIA, KOLKATA
SATURDAY, NOVEMBER 28, 2015

Robotic future for prostate surgeries?

Prithvijit.Mitra
@timesgroup.com

Kolkata: More than 60% of prostate gland surgeries in the country could be done by robots in ten years, according to Prokar Dasgupta, consultant urologist at the London Clinic, UK and a pioneer of robotic surgery techniques in oncology.

In Kolkata to join an awareness programme, Dasgupta – credited with having developed a unique method to treat overactive bladders – felt prostate cancer was yet to be taken seriously which delayed treatment, often resulting to death.

> Late diagnosis is more common in prostate than other forms of cancer. I strongly recommend robotic surgery for it's painless, precise and ensures quick recovery
>
> **Prokar Dasgupta** | CONSULTANT UROLOGIST, LONDON CLINIC

"Late diagnosis is more common in prostate than other forms of cancer. While it is not easily detected, patients were generally loathe to seek treatment. There are serious misconceptions about the disease, including a belief that it isn't fatal which is not true. Early diagnosis and surgery can save a large number of patients. I strongly recommend robotic surgery for it is painless, precise and ensures quick recovery," said Dasgupta, who leads the British Journal of Urology International as its editor-in-chief.

Number of prostate cancer cases was rising faster than most other forms, particularly in metros, including Kolkata, according to the city-based Prostate Cancer Foundation. In the 50 plus age bracket, prostate cancer – which strikes only men - was the second most common form of the disease after lung cancer. "We need to be cautious and undergo screening. It is the only form of cancer that can be cured through surgery provided the disease hasn't spilled beyond the prostate. Surgery can help even in cases where the disease has spread marginally beyond the organ," said Dasgupta.

But few sought timely treatment, said Amit Ghose, consultant urologist, Apollo Gleneagles Hospital. "There's a misconception that the disease happens only in the West. But now we live in a global village where dietary patterns and lifestyle are similar across countries. These are the two biggest triggers of the disease and Indians are as prone to it as any other population," said Ghose.

New Xi Robotic program at Fortis Hospital Gurgaon

We heartily welcome Dr. Rama Joshi to the elite Robotic surgeons club and wish a very successful GYNO Robotic program at Fortis, Gurgaon

The 'Gyn Oncology Robotic Program' at Fortis Gurgaon, India kick started successfully on Saturday 2nd Jan'16.
The mentor team of Prof. Dr. Somashekhar S P and his team member Dr. Ashwin KR from Manipal Hospital, Bangalore came down to Fortis Hospital Gurgaon to initiate the Robotic Gyn Onco program. Dr. Rama Joshi under the mentorship of Prof. Dr. Somashekhar successfully completed two complex Gyn Onco Robotic procedures, back to back on the same day.

New Robotic Surgeon Dr. Rama Joshi with her mentor Prof. Dr. Somashekhar S P

The mentor watches closely as the second surgery goes on

Robotic team at Fortis Gurgaon with mentors at the end of the day

da Vinci Xi Robotic Surgery at Delhi State Cancer Institute (DSCI)

DSCI OT Team for Robotic Surgery is all charged up post acquiring one of the first da Vinci Xi Robotic Surgery Systems in the region and the first Robotic Surgery System under the Delhi Govt. hospitals. The System has definitely brought convenience to patients through minimal invasive and practically blood-less surgery.

As we know, surgery can be done by Open method or by minimal invasive Surgery (MIS) techniques which could be further categorized into laparoscopic surgery on two dimensional monitors or the newer generation innovative computer assisted three dimensional da Vinci Robotic Surgery to override limitations that arise out of laparoscopy.

da Vinci robotic surgery, once mastered, has the ability of simulation of open surgical techniques along with technical ease of magnified stereoscopic clear vision, fine and precise dissection, suturing and perfect homeostasis in a large workspace provided by pneumo-peritoneum.

Ever since it was conceptualized, minimal Invasive surgery has been very attractive for all abdomino-pelvic as well as chest surgeons and very luring for the patients too. There were obvious advantages as compared to open surgery as far as patient perspectives were taken into view. But what about surgeons? MIS by laparoscopy meant standing for long hours for surgeons with lot of challenges faced in several complex procedures that the surgeons wish to do to scale up their skills.

Surgical manoeuvers in laparoscopy are limited due to straight rigid sticks allowing five degrees of freedom in counter-intuitive hand-eye co-ordination, with unsteady two dimensional image. Hence complex gynecological surgeries remained challenging with consequent low acceptance.

In July 1997, FDA approved Computer assisted surgical system – the robot developed by Intuitive surgical known as the da Vinci Surgical system with the advantage of improved articulation with seven degrees of motion, scaled tremor free motions, true stereoscopic vision and improved ergonomics with technical advantage of allowing manoeuvers similar to open surgery. The system during this period, has undergone several upgradations for enhancing the scope of its application and safety, the latest version being the Xi model launched in 2014.

DSCI was one of the first institution in India to have placed an order for the Xi System and we share our experience as beginner in computer assisted robotic surgery with the bliss of having performed twelve pan hysterectomy cases in different gynecological indications.

After having practiced on the Si Simulator and now using the Xi System in our initial cases, we may comfortably say that this fourth generation Xi is very user friendly. It is easy to orient and dock with its laser cross lights.
Open surgery hand movements can be replicated with ease as compared to Laparoscopy and there is less tug of war to keep the intestines away as compared to open surgery owing to the acute trendlenberg positioning of the patient.
Surgery is controlled by the chief surgeon because camera control and vision, retraction of tissues and organs, along with performance of surgery with dissection and cautery can be performed through multitasking by using both hands and legs simultaneously.

Minimal invasive surgery becomes less dependent on assistant surgeons who can also be comfortably sitting and concentrating on the work assigned to them like gut retraction.
Dissection is easier because of endowristed movements with 7 degrees of freedom that is much more than the limits of the human hand.
In fact the whole surgery is performed in a large workspace created by the pneumoperitoneum aided by most innovative and advanced technology similar to that used in military and NASA services.
There is also limited and controlled blood loss because of the excellent electrosurgery unit attached with the system and suturing is as simple as in open surgery.
The da Vinci has the potential to teach a surgeon how to be good and precise in surgical movements and that surgery is an art akin to a complex space mission and that the surgeon needs to stay totally focused on the job.

Thus the system has turned out to be highly alluring for the surgeons as well as the patients, with the surgical pleasure of performing complex procedure by a minimal invasive technique that helps escape long incisions, extensive abdominal layers and gut retractions to create workspace resulting in less tissue injury, less post operative pain, faster recovery and no ugly scars.

The end beneficiaries of this magnificent surgical tool are both - the surgeons and the patients! With time the equipment and consumables will begin to get more economical and that will help go a long way in benefitting the common man to make optimum use of this efficient and patient-friendly surgical tool.

TORS Workshop at RGCI, Delhi Dec 2015

Live workshop on “Transoral Robotic Surgery” was organized by Rajiv Gandhi Cancer Institute and Research center on 19th December 2015. Dr Chris Holsinger [Professor and Chief of Head and Neck Surgery at Stanford University Medical Center] was the Invited faculty for the workshop. He is one of the pioneers of TORS in the world. Two live surgeries were demonstrated to the audience by Dr Chris Holsinger and Dr Surender Dabas.
Workshop was attended by more than 120 Head & Neck oncologist. There was interactive discussion about application of robotic surgery in head & neck cancer and its future in management of Head and Neck Cancers. This workshop was attended by surgeons from AIIMS, Medanta, SGRH, Apollo Delhi, Apollo Chennai & PGI Chandigarh. The workshop was well appreciated by all the delegates and faculty.

Dr Surender Dabas at the ***da Vinci*** console

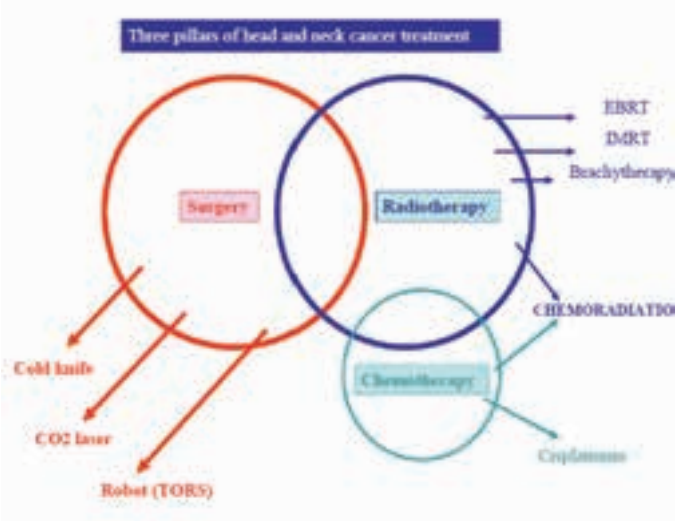
About Head & Neck Cancer & TORS: -

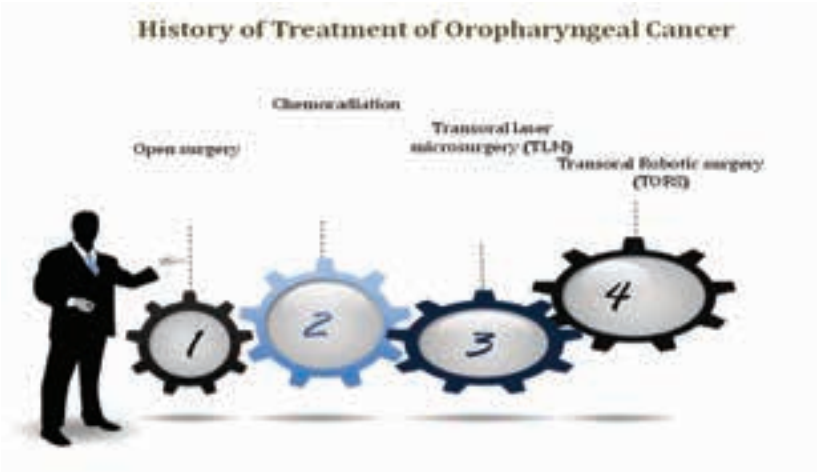
Head and Neck cancers represent a major international health problem, accounting for the fifth most common type and cause of cancer related deaths worldwide. In India Head and Neck cancers account for >30% of all tumor burden.

Goals of treatment of H/N cancers

1. Cure of cancer
2. Cosmesis – preservation and restorations of functions
3. Function preservation – speech/ respiration/ swallowing
4. Prevent recurrence and 2nd primary cancers

Treatment options in Head and Neck cancers:





Open surgical approaches to the oropharynx can be associated with morbidities such as cosmetic deformity, malocclusion and dysphagia. Therefore, a trend toward using radiotherapy and concurrent chemotherapy as a primary modality in case of oropharyngeal cancer has been observed in the last few decades. However, evidence of a clear advantage of concurrent chemoradiotherapy over using combined treatment (primary surgery followed by radiotherapy or chemoradiotherapy) is still lacking, while toxicity of intensive chemoradiotherapy causing severe dysphagia with dependence on a gastrostomy tube has been well documented.

In recent years, Transoral Robotic Surgery (TORS) has been used for the removal of pharyngeal and laryngeal cancers with the objective to improve functional and aesthetic outcomes without worsening survival.
Based on reports in transoral laser surgery (TOLS), the benefits of the transoral approach to the pharyngo-laryngeal lumen are well known.

TORS Workshop at RGCI, Delhi Dec 2015

For those not familiar with the term 'robotic surgery' - it is performed utilizing the da Vinci surgical system. The surgeon sits at the console and controls micromanipulators, which in turn are connected to a robotic cart at the patient's bedside. In TORS, three arms are routinely utilized. The central arm has a double video endoscope with high-quality video that gives the surgeon a three-dimensional view of the operative field via the console. The two other arms carry interchangeable instruments (approximately 5mm wide and 2 feet long) with miniaturized tools on the end that mimic standard surgical instruments (i.e. electrocautery, pickups, etc.).

The tips of the double-video endoscope and the instrument arms are inserted transorally and the assistant sits at the bedside to aid with suctioning and retraction. The tips of these robotic surgical instruments are also 'wristed', so when surgeons move their wrist and hands at the console, the entire motion is scaled down to the miniaturized 'robotic' instruments, with benefits such as tremor filtration.

ADVANTAGE OF TORS:

Technical advantages:

- Clearer and wider view of the surgical field
- Better 3D visualization of structures
- Access to the tumour via a smaller approach
- Use of miniaturized tools
- Tremor filtration
- Reaches "blind corners" of the pharyngo-laryngeal complex

Functional advantages:

- Avoid disfiguring mandubulotomy
- Reduces the need of adjuvant radiation/ or chemotherapy
- Avoid tracheostomy/ gastrostomy
- Improves the return to normal speech and swallowing
- Less blood loss & postoperative pain
- Minimal scarring
- Reduced risk of wound infection
- Shorter hospital stay & recovery time

INDICATIONS OF TORS:

Transoral robotic surgery can be done in naïve patients as well as for salvage in residual or recurrent tumors post CT/RT.

1. T1/ T2 oropharyngeal cancers
2. Selected T3 oropharyngeal cancers
3. T1/ T2 supraglottic cancers
4. T1/T2 hypopharyngeal cancers
5. Pharapharyngeal space tumors

CONTRAINDICATIONS OF TORS:

1. Reduced mouth opening < 1.5 cm
2. Incomplete lesion visualization
3. Mandible involvement
4. Internal carotid artery involvement
5. Prevertebral fascia involvement
6. Tumors involving >50% of base of tongue or the posterior pharyngeal wall

OUR EXPERIENCE AT RGCI

We started our Transoral Robotic Surgery program in March 2013. We are doing TORS in naïve patients as well as salvage treatment after failure of CT/RT. Till today we have done 220 TORS procedures.

Dr. Jagdishwar Goud Gajagowni earns Award in Korea

Dr Jagdishwar Goud Gajagowni is the Head Of Surgical Oncology and Clinical Director, Robotic Oncosurgery at Krishna Institute of Medical Sciences (KIMS).

Recently, he was recognized at the 10th Annual International Robotic Surgery Live 2015 event in Seoul, South Korea where he got the best paper recognition for Esophagectomy at Severance Hospital, Yonsei, Seoul, amongst a noted group of talented Koreans and Japanese.


Outstanding Poster Award

Presented To

Robotic Radical Hysterectomy in comparision to Laparoscopic Radical Hysterectomy in an upcoming centre in India

Dr. Jagdishwar Goud, Dept of Surgical Oncology, KIMS Hospitals Secunderabad

Introduction & Objectives:
Clinical applications for robotic systems have been evolving rapidly and are now used widely in various surgical fields including oncology.
The present study compared the two minimal invasive techniques in management of early cervical cancer.
The aim of the study is to compare the safety, morbidity, intra operative, pathologic and postoperative outcomes of robotic radical hysterectomy (RRH) to total laparoscopic radical hysterectomy (TLRH) in patients with early stage invasive cervical cancer stage IB1 TO IIA.


Fig 1: The uterine artery is identified and dissected from the point of its origin at the hypogastric artery, clipped and cut.


Fig 2: Obturator nerve and obturator fossa and pelvic sidewall.

Parameters	RRH (N=26)	TLRH (N=26)
Mean duration of surgery (minutes)	158 (140-190)	174 (150-210)
Mean estimated blood loss (ml)	110 ml (50-300)	160 ml (80-400)
Mean total number of pelvic nodes (n)	27	20
Postoperative complications	4	5


Fig.5: Vaginal cuff closure with intracorporeal suture

Conflict of interest: None

Study Design:
A prospective nonrandomized analysis of all cases of Radical Hysterectomy, either laparoscopic or robotic approach performed for cervical cancer at present center.

Result:
A total of 52 patients met our inclusion criteria and had either TLRH or RRH with pelvic lymphadenectomy performed. The patient groups were similar with respect to age with mean age of 54.8 yrs (39-68) in RRH and 52.6yrs (38-68) in TLRH.
There were no differences in clinical tumor characteristics, such as stage, histology, and lymph-vascular space involvement between the two groups. The mean operative time, estimated blood loss, and length of postoperative stay were similar between the two patient groups (P > 0.05).


Fig.3: Unroofing of ureter


Fig.4: Clipping of infundibulopelvic ligament

Conclusions:
1. Robotic radical hysterectomy appears to be safe and effective therapeutic procedure for managing early-stage cervical cancer without significant differences when compared to TLRH.
2. The results in respect to operative time, blood loss, hospital stay found similar.
3. The oncological outcome in Robotic radical hysterectomy is superior in terms of number of lymph nodes and parametrial bulk.

- See more at: http://vfrsi.vattikutifoundation.com/jagdishwar-goud-gajagowni-earns-award-in-korea

Dr. Jagdishwar Goud - Outstanding Poster Award

GAJA's Technique of Robotic esophagectomy for esophageal carcinoma with 3 field nodal dissection.

Dr. Jagdishwar Goud Gajagowni, Dr. Rahul S Kanaka, Dr. Vikas.B.K
Dept of Surgical Oncology, KIMS Hospitals Secunderabad

INTRODUCTION & OBJECTIVES

Esophagectomy with 3 field lymphadenectomy offers the best option of cure and local control but at increased risk of cardiopulmonary complication, blood loss mainly due to thoracotomy and hence VATS has improved the patient compliance.

Robotic surgery with 3-dimensional magnified field, tremor filtration, 7 degrees of instrument mobility and short learning curve offers better ergonomics for safer surgery.

The aim of the study is to compare the safety, morbidity, intra operative, pathologic and postoperative outcomes of robotic esophagectomy with 3 field lymphadenectomy for esophageal cancer with an emphasis on unique 10 step technique.

STUDY DESIGN: A prospective nonrandomized analysis of 55 consecutive cases of Robotic esophagectomy with 3 field nodal dissection from August 2011 to August 2015.

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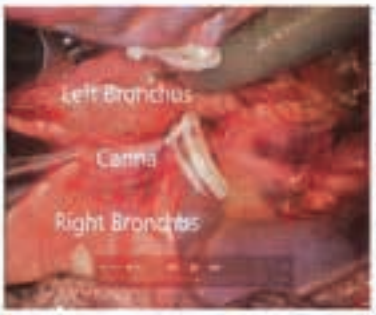
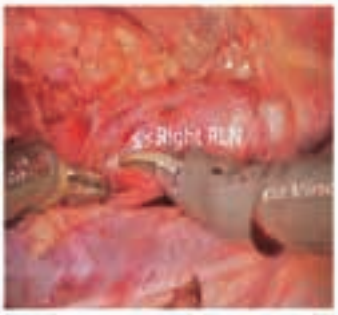
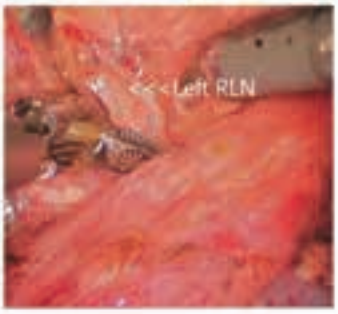


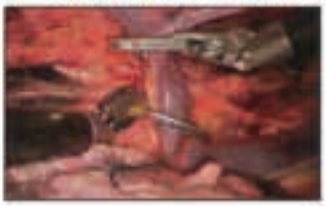




RESULTS-GAJA'S Technique of Robotic esophagectomy with 3 field lymphadectomy(55 cases-2011-2015)			
Age	64 yrs(23-78)	Intra Operative complications	
Sex(M:F)	7:3	Conversion	0%(0/55)
Histology(SCC:Adeno)	7.1:2.9	Temporary RLN injury	7%(4/55)
Tobacco Intake	83%	Permanent RLN injury	0%(0/55)
Alcohol intake	86%	Tracheal injury	1.8%(1/55)
Docking period	10 minutes	Thoracic duct injury	1.8%(1/55)
Duration of surgery	205 min(154-246)	Splenectomy	0%(0/55)
Blood loss	164 ml(110-300)	Post Operative complications	
Ventilatory support	2.3 days(2-5)	Cardiac complication	1.8%(1/55)
Hospital stay	7 days(6-12)	Pulmonary Complication	1.8%(1/55)
Morbidity	27%(15/55)	Anastomotic leak	0%(0/55)
30 days mortality	3.6%(2/55)	Feeding Jejunostomy leak	1.8%(1/55)
Histopathology		Stricture	10.9%(6/55)
R0 resection	98%	DVT	0%(0/55)
RLN node metastasis	25%		

CONCLUSIONS:

1. Robotic esophagectomy with 3 field lymphadenectomy appears to be safe and effective procedure for managing esophageal cancer nd results comparable to VATS
2. Our 10 step technique makes surgery safe with minimal complications.
3. A Randomized controlled trial is neede to show the actual benefits of robotic aproach to esophagus.



Robotic radical Hysterectomy in comparison to Laparoscopic Radical Hysterectomy in an upcoming centre in India

Dr. Jagdishwar Goud, Dr. Kaveri Shaw, Dr. Kiranmai Gottupu, Dr. Bala Vikas Kumar
Dept of Surgical Oncology, KIMS Hospitals Secunderabad

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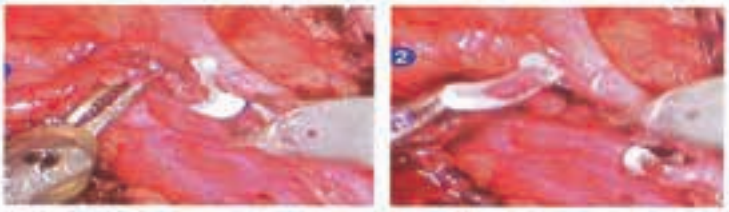

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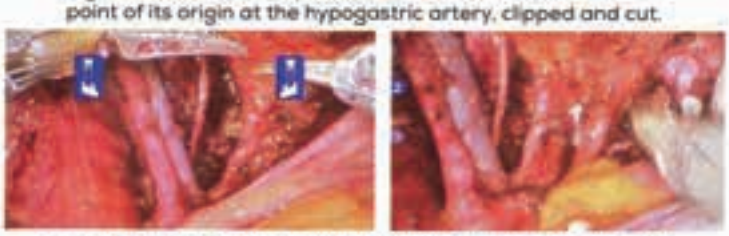

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Fig.3:Unroofing of ureter

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2. The results in respect to operative time, blood loss, hospital stay found similar.
3. The oncological outcome in Robotic radical hysterectomy is superior in terms of number of lymph nodes and parametrial bulk.

“Dynamics of Surgical Innovation” JIPMER, Pondicherry

Vattikuti Technologies organized a Guest Lecture by Dr. Mahendra Bhandari, CEO Vattikuti Foundation on 24 November 2015 at JIPMER, Pondicherry. Around 80 doctors attended this event.

Dr.Bhandari made a presentation on the history of Robotic Surgery and Vattikuti’s commitment to make Robotic Surgery Programs a grand success across the globe. He highlighted the benefits and features of a Robotic Program with da Vinci systems - like better vision, endo-wrist movement, etc. and also dealt in detail about the spectrum of benefits from nerve-sparing surgery to Kidney transplant.

He stressed on the dynamic field of urology and advancing technology contributing to the growth on a daily basis. He also emphasized on the benefits of starting a Robotic Program in JIPMER, which majorly caters to the middle and lower strata of the society. Dr. Bhandari having started the Urology program at JIPMER was very nostalgic about the Department of Urology there and this was equally acknowledged by all the senior members of the Institute. The surgeons were also eager to resolve their queries through Dr.Bhandari.

They arranged for a visit to their Urology Department which helped facilitate an interaction with the faculty members. Later Dr.Balachander, Medical Superintendent organized a meeting with the multidisciplinary “Robotic Surgery Committee” in the board room to discuss on initiating a Robotic Surgery Program in their institute. This meeting was presided by Dr.S.C.Parija, Director, JIPMER.

They thanked the dignitaries from Vattikuti Technologies, Mr. Gopal Chakravarthy, CEO and Mr. Vasudevan, Regional Manager for system sales in South for organizing this meeting and are looking forward for the organization’s support to begin a da Vinci robotic program in this prestigious institution.

Media News

***Indiatimes*|*The Times of India*|*The Economic Times*|**

Gurgaon: Da Vinci Xi robots perform among the first of its kind surgery

GURGAON: A 35-year old patient from Republic of Congo, who was suffering from Yousuf's Syndrome, has undergone a surgery with Da Vinci Xi system, one of the most advanced robotic surgical technology for performing minimal invasive surgery. This is reportedly one of the first such surgeries in India.

The system allows a doctor to perform a surgery with pinpoint accuracy and little damage to surrounding tissues. The benefits of robotic surgery include a minimally invasive approach, faster return to daily activities, fewer complications, and shorter hospital stay with reduced hospitalization costs.

Yousuf's Syndrome is a condition, where due to complications from previous caesarean sections, an anomalous fistulous communication had formed between the uterus and the urinary bladder. This had led to menstrual bleeding draining into the bladder, leading to cyclical hematuria and repeated infections. The patient, therefore, occasionally had urinary incontinence, as urine would flow into the uterus and leak out.

"Previous medical consultations and reviews had all pointed towards a hysterectomy.

However, she was not willing to undergo the procedure for removal of the uterus. With our robotic surgery programme, we not only managed to separate the fistula that had formed between the two organs, but also saved her from a hysterectomy. Surgeons at FMRI are currently utilizing advanced minimally invasive surgical techniques for all surgical specialties," said Dr Sanjay Gogoi, Director, Urology and Renal Transplants at Fortis Hospital.

Talking about the benefits of Da Vinci Xi system, Dr. Gogoi said, "The device allows high definition 3D imaging, allowing surgeons to conduct complicated procedures with relative ease. The procedure involves using wristed instruments that bend and rotate far beyond the abilities of the human hand. Moreover, the tremor filtration and intuitive motion technologies allow the surgeons to operate with steady natural motion with the comforts of sitting on an easy chair."

15-Years of Robotic Surgery at VUI [Vattikuti Urology Institute]

Congratulations to Dr.Mani Menon and his team for the 15th anniversary of the robotic surgery program at VUI – Henry Ford hospital, Detroit, Michigan, USA

The Vattikuti Urology Institute (VUI) at the Henry Ford Hospital in Detroit, Michigan is a clinical and research center for urological care. The VUI is notable for being the first institute to establish robotic surgery as a treatment for patients with prostate cancer. To date, the VUI has performed more than 5,000 robotic procedures. Ranked consistently high by U.S. News and World Report, VUI is also one of the largest and most active urology departments in the United States, with nearly 50,000 patients annually from all 50 states and nearly 25 countries.

Dr. Mani Menon with VUI and OHIO STATE UNIVERSITY CADAVER LAB STAFF
(Also seen: VF CEO Dr. Mahendra Bhandari, Dr. Akshay Sood and DR. Wooji Jeong)

The VUI & Robotic Surgery

The Vattikuti Urology Institute is considered a pioneering institute in what has been called a “medical revolution”: the use of robotics for the surgical removal of the prostate and other urological procedures. There is lesser trauma and pain, shorter hospital stays, and minor scarring for the patient undergoing minimally invasive robotic surgery.
Robotic Surgeons at the VUI are equipped with the da Vinci robotic surgery system which increases surgical precision that helps detect and preserve delicate nerves and muscle that surround tissues. VUI's surgeons have developed and practice a variety of minimally invasive procedures utilizing robots. These surgeries include:
"Vattikuti Institute Prostatectomy", Robotic Partial Nephrectomy, Robotic Radical Nephrectomy, Robotic Pyeloplasty, Robotic Nephroureterectomy, Robotic Pyelolithotomy, Robotic Renal Cyst Decortication

The "Vattikuti Institute Prostatectomy"

The Vattikuti Institute Prostatectomy (VIP) is a robotic procedure developed by the VUI. This is the institute's preferred procedure for the removal of the prostate. Dr. Mani Menon had developed the VIP procedure and under his guidance, urologists at the VUI were the first in the world to perform using the da Vinci robot.

- See more at: http://vfrsi.vattikutifoundation.com/15-years-of-robotic-surgery-at-the-vui-two-different-perspectives

DR. KHURSHID GURU
Director of Robotic Surgery
Roswell Park Cancer Institute,
Buffalo, New York

Reflections on the 15th Anniversary of the Robot Assisted Radical Prostatectomy at Vattikuti Urology Institute (VUI)

DR. KHURSHID GURU

DR. KHURSHID GURU with DR. MANI MENON

The Vattikuti Foundation continues to recognize the Fifteenth Anniversary of Dr. Mani Menon's first Robot Assisted Radical Prostatectomy.
Professor Khurshid Guru is a former Vattikuti Urology Institute Resident. His reflections at the Centennial Celebration of VUI, Henry Ford Hospital, Detroit:

"One of the most important things is that when the robotic prostate revolution started at Henry Ford, we were junior Residents and one of the issues was that- everybody wanted to do prostatectomies- and one of my goals was to learn how to do cystectomies. Dr Menon had the vision to send me to Mansoura, which is one of the world's most famous bladder cancer centers in Egypt, with some of the finest surgeons. After that, he brought me back and gave me strong training at Henry Ford. The amazing part is that- I was able to kind of put these two skills together to start a bladder program at Roswell Park Cancer Institute. The rest is history".
"One of the most amazing and innovating- and kind of courageous thing- was that Dr. Menon went to Egypt with the robot. We had- never ever dared to take technology to a new place, to some of the finest bladder surgeons and kind of tried the procedure with them and get their insights. And that vision- almost more than a decade back, of taking the robot, and making the most critical surgeons for this procedure look over your shoulder, while you are developing your technique, I think was kind of a feat in itself. It was definitely some of the best open surgeons, with new technology, and with a visionary, together. And they built this whole idea of using the robot for bladder cancer".

Basically the proof of the pudding is in what you see around at VUI. Fifteen years ago, what he did was innovating, new, risky and even kind of scary. He set the bar for prostatectomy high.
If you look around the world, a lot of people have benefitted with this technique that come out of Henry Ford Hospital. The quality of this procedure and the results are remarkably better and consistent with a lot of surgeons than what it was fifteen years back when you only had a few master surgeons in a few areas. Now this has gone- like they say- viral and that too with very good results

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TIMES CITY

Tumour removed without a cut

Organ Taken Out Through The Vagina

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New Delhi: Doctors at a Delhi hospital have successfully removed cancerous pancreas from a 40-year-old woman without an open surgery. They used robotic arms to detach the diseased organ and drew it out through the vagina.

It is a major achievement as laparoscopic surgery for the removal of pancreas—surgeons call it "tiger's territory" due to the complexities involved—is rarely done in India. Even abroad, only a few centres use the "Whipple procedure" or minimally invasive surgery for the removal of pancreatic cancer, and fewer still do it with robots. The successful operation at Sir Ganga Ram Hospital is being seen as a breakthrough, therefore.

"We did not even cut open the abdomen to take out the tumour. It was taken out through the vagina, which helped reduce damage to the surrounding vessels," said Dr Brij Bhushan Agarwal, vice chairman, department of laparoscopic and general surgery at SGRH.

In the Whipple procedure, a cancerous pancreas is removed without damaging the main blood vessels, small intestine and the bile duct around it.

Dr Agarwal said open surgery takes nearly 10 hours and even with a robot's assistance the Whipple procedure took more than 10 hours to complete. "It was the first time we did the procedure with robot assistance so it took longer. We took breaks to plan the steps for surgery and at times prayed for its successful outcome," he added.

The patient, a 40-year-old woman from Vitam Nagar in west Delhi, is said to be doing fine post-surgery. "She was discharged on the sixth day after the procedure. Her clinical and lab parameters are fine and she has resumed her household duties too," Dr Agarwal said.

Dr S K Sarin, director of Institute of Liver and Biliary Sciences (ILBS), said the successful surgery with a robot is a landmark achievement. "It is the future of pancreatic cancer surgery. With careful selection of patients and the right expertise, it can help save more lives."

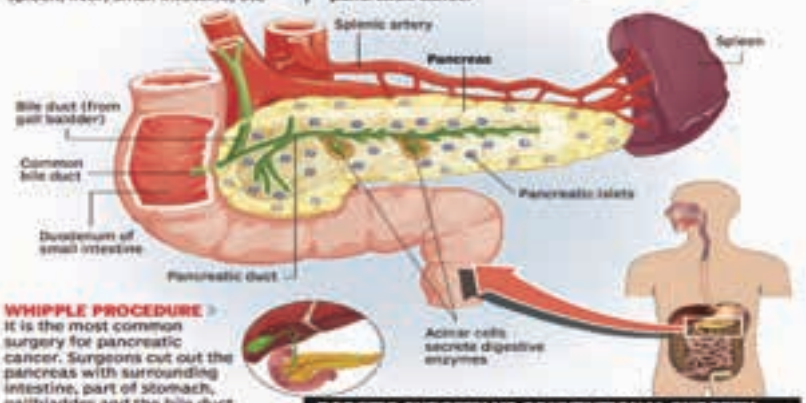
Cancer of the pancreas is uncommon and usually diagnosed late, said Dr P K Julka, professor of oncology at AIIMS, adding, "The five-year survival rate is between 10.7% and 27%, depending on the spread of the tumour. Surgery to remove the diseased pancreas in the early stages can improve the chances of survival."

Robotic arms allow precise manoeuvring through the patient's body. Also, suturing of the organs, which is crucial for avoiding complications post-procedure, is done accurately. "In an open surgery, I had to sit for 10-12 hours at a stretch to perform the procedure which was tiring. But a robot helps in teamwork since all the surgeons involved in the case are able to view each and every step clearly on the monitor attached to the robot," said Dr Agarwal.

MEDICAL BREAKTHROUGH

PANCREAS | Located behind the stomach, **the 6-inch long (15.24cm)** organ is surrounded by spleen, liver, small intestine, etc

The pancreas plays an **important role in digestion and regulation of blood sugar.** Three diseases associated with the pancreas are **diabetes, pancreatitis and pancreatic cancer**



WHIPPLE PROCEDURE | It is the most common surgery for pancreatic cancer. Surgeons cut out the pancreas with surrounding intestine, part of stomach, gallbladder and the bile duct. They reconstruct new pathways for digestion expelling the waste

Complexities involved | Sensitive location—it is sitting in the loop of duodenum (part of small intestine), the bile duct and main blood vessels. Any injury to the surrounding organs and tissues can cause death

Reconstruction of new pathway for digestion has to be foolproof | One of the main complications of this procedure is leakage of the pancreatic juice. It can cause sepsis

ROBOTIC SURGERY VS CONVENTIONAL SURGERY

Cut | In robotic surgery, surgeons operate through five key holes. Open surgery, on the other hand, requires cutting open the whole abdomen

View | The video images from the robot help surgeons perform the operation smoothly. In conventional procedure, the main surgeon ends up performing the task for 12 hours at a stretch with support from other doctors

Excision and suturing | The robotic arms, which can rotate 360 degrees, allow better resection and suturing of the organs, which is crucial for avoiding complications post-procedure

Lung cancer not of men or smokers alone, warn doctors

Lung cancer is no more a smoker's disease and has moved to the top of this category of life-threatening ailments among Indian males and the coming years will also see females too getting affected, doctors maintain, adding early detection is key to its cure.

"Of late, lung cancer has moved to Number One position among cancers in males in India. But the coming years will see that happen among females as well," said Arvind Kumar, chairman of Centre for Chest Surgery and director of Institute of Robotic Surgery, Sir Ganga Ram Hospital.

"Overall the coming decade is going to be one of lung disorders in our country. Timely corrective action and suitable treatment facilities may help tame the ill effect of this disaster waiting to happen," Kumar said, as the world observes lung cancer awareness month in November.

As doctors and healthcare staff in hospitals the world over prepare to build better understanding about this ailment, their biggest concern is that the dreaded disease often goes undetected due to lack of awareness among the afflicted patients.

Symptoms like persistent cold, cough, accompanied by sputum or blood, and signs of breathlessness call for a visit to an experienced medical practitioner, they maintain. But these conditions are often attributed to changing weather, prompting home remedies like hot milk with turmeric.

In reality it delays a visit to the doctor and thereby the chances of timely detection. A simple sputum test or an x-ray prescribed by family physician helps to rule it out. But often, it is also found that even experienced general practitioners mistake it for tuberculosis.

"Nicotine in cigarettes is as addictive as heroin or cocaine. Out of the 4,000 chemicals in them, over 50 are highly carcinogenic. A carcinogen is something that causes cancer. And we all know that cancer is a disease that often kills those who have it," Kumar said.

While smoking is a known risk factor, pollution, passive smoking and hazardous work environment -- like asbestos, mica, coal and bauxite mining -- also affect the lung's health, said L.M. Darlong, head - thoracic surgery at Rajiv Gandhi Cancer Institute and Research Centre here.

According to him, lung cancer among non-smokers, younger adults especially women who have been initially treated for tuberculosis is very prevalent in India. Therefore, the message: The Lung cancer is no more solely a smoker's disease.

To eliminate all doubts, doctors prescribe a screening, low dose CT Scan or biopsy, also referred to as tissue diagnosis, done by taking a small part of lung tissue for a test. Irrespective of the method of detection, doctors stress early detection still holds the key.

They said surgery is the best method to remove cancerous tissue that manifests in the form of nodules or lesions visible in X-Ray or a CT Scan. Regular post-surgery follow-up tests are also recommended for further treatments like radiation or immune therapy, if needed.

Ali Zamir Khan, head - Medanta Institute for Robotic Thoracic Surgery, said: "Smoker's cough is not to be taken lightly as it may be early signs of cancer."

Cigarette smoke, he said, destroys the special tracheal hair designed to trap germs and other foreign particles that enter the airways when a person breathes. This prevents the trachea from throwing out phlegm, hence causing cough." Doctors said lungs are the most fragile part of the human anatomy, playing a critical role in supplying oxygen to the blood. Smoking leaves carbon monoxide in the lungs for as long as eight hours after the last puff is inhaled, leaving that much less space for oxygen in the lungs.

Khan, who has been practicing computer-assisted lung surgery for several years, said he invests time with senior school students to explain the ill-effects of smoking and its causal role in cancer.

"I often speak to gatherings of general physicians on the need for prescribing reliable tests to rule out cancer before putting patients on anti-tuberculosis treatment," said Khan, explaining this helps in reaching out to a larger target audience. Doctors said robotic surgery -- as being propogated by the Michigan-based non-profit Vattikuti Foundation -- was also picking up as the preferred option to treat various cancers due to minimal blood loss, shorter hospital stays, quicker healing of wounds and healthier post-operative life. *(IANS)*

Vattikuti Foundation to Award Scholarships to Robotic Surgeons Council of India

RSC 2016

Vattikuti Foundation will be awarding up to nine scholarships during the Robotic Surgeons Council of India meeting to be held at Indraprastha Apollo Hospital, Delhi on 8th & 9th April, 2016.

e-mail your entries to: scholar@vattikutifoundation.com
Remember the deadline is 1st February, 2016

- See more at: http://vfrsi.vattikutifoundation.com

Don't wait! Apply now for a Vattikuti Scholar Scholarship to:

ROBOTIC SURGEONS COUNCIL

08-09 APRIL 2016

Indraprastha Apollo Delhi Hospital

VATTIKUTI FOUNDATION

The Vattikuti Foundation is proud to announce granting up to NINE residents and/or fellows paid airfare and hotel stay in Delhi to attend the **Robotic Surgeons Council** meeting at Indraprastha Apollo Delhi Hospital 09-10 APRIL 2016.

These will be granted on a merit-based system. Residents and fellows must be within one year of their MCH or DNB in a speciality (Urology, Gynaecology, Thoracic, Onco Surgery or ENT).

Once granted, he or she will be given:
-Access to the RSC meeting
-Free hotel for 2 nights, shared hotel room
-Economy class airfare
-Inclusion in the Vattikuti Scholar program

All interested parties must submit their CV and a one page document describing why they would like to attend RSC. Send both documents to the Vattikuti Foundation by 1 February, 2016.

All are welcome to apply, except for the winners of previous Vattikuti Scholar scholarships to the RSC.

Awards & Recognition

Vattikuti Technologies Recognized as Gold Standard for Excellence in *da Vinci* ™ Service at the 5th Annual Intutive Surgical Distributors Summit Nov 4 th& 5 th2015, Osaka, Japan

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