



# BHATIA GLOBAL HOSPITAL & ENDOSURGERY INSTITUTE

## NEWSLETTER

**VOL. 04**      **NO. 07**      **Annual subscription: Rs. 25/-**      **JULY 2004**

### CONTENTS

1. EDITORIAL  
- Site Relunched  
- Luck!
2. ARTICLE  
Robotic Surgery —  
Fantasy is today's reality
3. ARTICLE  
Robotic Surgery  
(contd.)
4. EVENT CALENDAR  
PHOTOGALLERY

Site relunched



- Books/eBooks/CDs
- Photogallery
- Video Library
- Instrumentation
- Learning Center
- Doctors Database
- Register with us
- For Doctors**



Visit us online at  
[www.BhatiaGlobalHospital.com](http://www.BhatiaGlobalHospital.com)  
[www.BhatiaEndoSurgery.com](http://www.BhatiaEndoSurgery.com)

BHATIA GLOBAL HOSPITAL AND  
ENDOSURGERY INSTITUTE

307-308, Ambika Vihar,  
Opp. Central School,  
Paschim Vihar,  
New Delhi - 110087

PHONE  
25270500, 25270701,  
25270702, 25256408

FAX  
91-11-2-5273200

MOBILE  
9810008507, 9810138656

EMAIL  
pbhatia@bol.net.in

WEBSITES  
[bhatia-global-hospital.com](http://bhatia-global-hospital.com)  
[bhatia-endosurgery.com](http://bhatia-endosurgery.com)

REGISTRATION NO  
2002-2003/512  
dt. 16-04-2002,  
Approval of hospital  
u/s 17(2)(ii)(b) of I.T. Act  
1961, F. No: Addl. CIT  
(Coord.) / Hospital/2002-  
03/3563

EDITORIAL BOARD  
Dr. Parveen Bhatia  
Dr. Indu Bhatia  
Mrs. Shalini Bhatia  
Mr. R. S. Bhatia

Design Credits  
Links 'n' Grafix  
51424287 / 88, 9811162454

## LUCK!

He worked by day & toiled by night. He gave up play & some delight. Dry books he read, new things to learn. And forged ahead, success to earn. He plodded & with faith & pluck; And when he won, Men called it luck!

- Anonymous

When Thomas Edison invented the light bulb, he tried over 2000 experiments before he got it to work. A young reporter asked him "How it felt to fail so many times". He said, "I never failed once. I invented the light bulb. It just happened to be a 2000-step process." "Failure is the highway to success," Tom Watson Sr. said. "If you want to succeed, double your failure rate."

In the 1940s, another young inventor named Chester Carlson took his idea to 20 corporations, including some of the biggest in the country. They all turned him down. In 1947, after 7 long years of rejections, he finally got a tiny company in Rochester, NY, the Haloid company, to purchase the right to his invention- an electrostatic paper-copying process. Haloid became Xerox Corporation!.

A little girl, when was 4 years old, contracted double

pneumonia and scarlet fever, which left her with a paralyzed left leg. At age 9, she removed the metal leg brace she had been dependent on and began to walk without it. By 13, she had developed a rhythmic walk, which doctors said was a miracle. That same year she decided to become a runner. She entered a race and came in last. For the next few years, every race she entered, she came in last. Everyone told her to quit, but she kept on running. One day, she actually won a race. And then another. From then on, she won every race she entered. Eventually this little girl — Wilma Rudolph, went on to win three Olympic gold medals.

With a desire to win a lottery ticket, a man started worshipping the God. Twice daily he performed Prayers to please the Lord. He continued this religiously. Twenty years passed by. Goddess, impressed by the man's dedication & worship, asked the God, "This devotee of yours is praying tirelessly with full devotion for last twenty years. Why don't you fulfill his wish of winning a lottery ticket?". "I got pleased fifteen years back" replied the lord. "Then what is keeping you from granting his wish?" asked the Goddess. "Well! I am waiting for him to BUY A LOTTERY TICKET," was the answer.

Luck, God's helping hand or any other form of support is helpful if and only if there lies a foundation of sincere effort & hard work.

R. S. Bhatia      Dr. Sandeep Chopra      Meenakshi Ahuja

"It's a funny thing about life. If you refuse to accept anything but the best, you very often get it."

- W. Somerset Maugham



ARTICLE

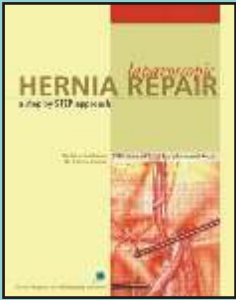
# ROBOTIC SURGERY: Fantasy is today's reality Changing the culture of surgery!

Dr. Parveen Bhatia  
Consultant Laparoscopic Surgeon

Dr. Bharat Bhasin  
Surgical Associate

JULY '04

Vol. 4 No. 07



Laparoscopic Hernia Repair  
(a step by STEP approach)

Forewords by  
Dr. J. Barry Mckernan  
Dr. Adarsh Chaudhary

Contents  
200 pages with 16 chapters,  
300 coloured photographs &  
diagrams)

Authors  
Dr. Parveen Bhatia  
Dr. Suviraj J John



The eBook  
CD on  
Laparoscopic Hernia Repair  
(a step by STEP approach)

The electronic version of this  
ebook (eBook) is also  
available on our websites:  
- BhatiaGlobalHospital.com  
- BhatiaEndoSurgery.com

Contact  
**Amit Mattoo**,  
Global Digital Services,  
Global Hospital &  
Endosurgery Institute,

Phone  
25270701, 25270702  
25270500, 25256408

Fax  
25273200



One of the latest technical advances in minimally-invasive surgery is robotic surgery. Minimally-invasive, laparoscopic surgery has achieved excellent outcomes for patients in reducing the length of hospital stays, the need for pain medication, the time needed to recover from surgery, providing a better cosmetic result. As the next step in technology, robotic surgery offers all the benefits of laparoscopic surgery along with the potential for increased precision and effectiveness.

**DEFINITION**  
The word "Robot" is taken from the Czech robota, meaning forced labor, has evolved in meaning from dumb machines that perform menial, repetitive tasks to the highly intelligent anthropomorphic robots of popular culture.

Robots have often been thought of as machines that replace humans. These machines have been used in manufacturing, space exploration, and other areas. However, they can also be used as surgical tools. Many people think of these tools as devices used to replace the physician. However, they are used to complement human surgeons.

The field of robotics provides an enhancement of human performance, the ability to project surgical expertise to remote and distant places, and recreation of a patient in a "virtual" form. Robotics takes the surgeon's motions and changes them into electronic signals which through a computer can be enhanced. The result is performing a procedure with greater accuracy and precision..

**HISTORY**  
The history of robotics in surgery begins with the Puma 560, a robot used in 1985 by Kwoh et al to perform neurosurgical biopsies with greater precision.[6,11] Three years later, Davies et al performed a transurethral resection of the prostate using the Puma 560.[12] This system eventually led to the development of PROBOT, a robot designed specifically for transurethral resection of the prostate. ROBODOC, a

robotic system was designed to machine the femur with greater precision in hip replacement surgeries.[1] ROBODOC was the first surgical robot approved by the FDA.

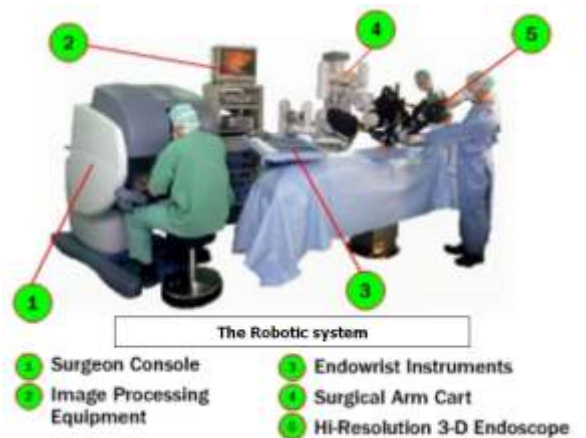
The first coronary bypass surgery in a human patient using robotic arms manipulated by the surgeon was performed by Dr. Ralph Damiano at the Milton S. Hershey Medical Center, Pennsylvania.

**WHAT IS ROBOTIC SURGICAL SYSTEM ?**  
The robotic surgical system is a computer-enhanced minimally invasive surgical system consisting of three components:

High-definition camera providing the surgeon a true, minimally invasive view of the surgical field, magnified up to 15 times. With this technology, the surgeon can more easily identify vital anatomy such as the delicate nerves and blood vessels surrounding specific anatomy.

Surgical cart including the instruments and three robotic arms whereby the laparoscope and two instruments are inserted. The instruments are designed to mimic the movement of the surgeon's hands, wrists and fingers. Their extensive range of motion allows precision that is not available in standard minimally invasive procedures.

Surgeon console containing the master controls that the surgeon uses to manipulate the instruments. The handles or "Masters" translate the surgeon's natural hand and wrist movements into corresponding, precise and scaled movements. The instruments are only able to move when commanded by the surgeon.



Robot can accomplish what the human surgeon cannot because of its ability to mimic the human hand within a small, contained space. The EndoWrist™ Instruments transform the surgeons' wrists, hand and fingers into tiny instruments. During the procedure, while the console surgeon operates the sophisticated robot from a distance, the bedside surgeon is responsible for placement of the correct surgical ports and directing the robot into the patient.

## ARTICLE (contd.)



▲ Robotic hand simulating human hand

## BENEFITS OF ROBOTIC SURGERY

## Benefits to Patient

- Reduced pain and trauma to the body
- Less blood loss and need for transfusions
- Less post-operative pain and discomfort
- Less risk of infection
- Shorter hospital stay
- Faster recovery and return to work.
- Allows for a minimally-invasive approach in surgery which means much less scarring and improved cosmesis

## Benefits to surgeon

greater precision and dexterity where fine suturing techniques are required robotic arms eliminate the tremor of a surgeon's hands improved technique for surgery reduced fatigue during surgery - comfortable seated position at robotic controls.

## HOW IS ROBOTIC SURGERY DIFFERENT FROM MINIMALLY INVASIVE SURGERY?

Minimally invasive surgery is a general term for procedures that reduce trauma by performing operations through small ports rather than large incisions. Minimally invasive surgery is now a common place for certain procedures. But until now, we haven't been able to use minimally invasive techniques for more complex operations. With skilled surgeons and the da Vinci™ Surgical System, we can now use minimally invasive techniques in even the most complicated procedures. What all a robot can do for surgeons?

Robotic surgery can, in fact, be used for a number of procedures within multiple specialties including: general surgery (i.e. laparoscopic adrenalectomy, gastric bypass) gynecological surgery (i.e. cystocele repair, hysterectomy, tubal ligation) thoracic surgery (esophagectomy, lung biopsy, tumor resection) urological surgery (donor nephrectomy, prostatectomy, and ureter harvest) vascular surgery (aortic abdominal aneurysm and vena cava tumor) The Challenge and its solution According to the surgeons, the biggest challenge faced was minimising the "lag" effect — if the time delay between the surgeons and the robot was too long, or slightly out of sync, it would destroy the timing and "feel" of the surgeons. Experts believe that a time delay of 330 milliseconds would be the maximum acceptable delay, but thanks to years of research and development by France Telecom, this was cut down to a mere 150 milliseconds for the operation. The Learning Curve

The FDA requires manufacturers to train surgeons before they can use robotic surgical systems on patients. Ogden says

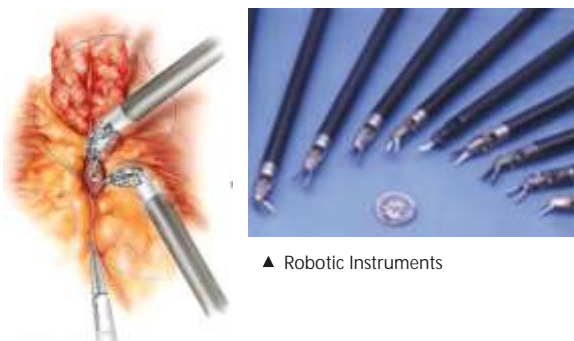
there is a significant learning curve involved. "As it stands now, it takes 12-18 patients before surgeons feel comfortable and before surgeons are able to perform the procedures as quickly as with standard techniques," he says.

Paul Nolan of Computer Motion says typical training for surgeons who buy the ZEUS system involves up to 40 hours, including experience at animal and cadaveric labs. The Future of Robotic Surgery

Robotic surgery is in its infancy. Many obstacles and disadvantages will be resolved in time and no doubt many other questions will arise. Many questions have yet to be asked; questions such as malpractice liability, credentialing, training requirements, and interstate licensing for tele-surgeons, to name just a few.

Many future "advancements" are already being researched. Some laboratories, including the authors' laboratory, are currently working on systems to relay touch sensation from robotic instruments back to the surgeon. Other laboratories are working on improving current methods and developing new devices for suture-less anastomoses. When most people think about robotics, they think about automation. The possibility of automating some tasks is both exciting and controversial. Future systems might include the ability for a surgeon to program the surgery and merely supervise as the robot performs most of the tasks. The possibilities for improvement and advancement are only limited by imagination and cost.

By providing the use of a variety of technologies to enhance the capabilities of human surgeons, robotics will become an increasingly vital component in the medical world. Doctors of the next century must learn to use this information to complement their capabilities in order to provide better patient care.



▲ Robotic Instruments

## REFERENCES

- Mack, M.J., Minimally Invasive and Robotic Surgery JAMA, 2001; 285: 5.
- Schulam, P.G., et al, Telesurgical Mentoring, Surgical Endoscopy, 1997; 11: 1001-1005.
- Sackier, J.M., Wang, Y., Robotically Assisted Laparoscopic Surgery, from Concept to Development, Surgical Endoscopy, 1994; 8.
- Falcone, T., Goldberg, J., Garcia-Ruiz, A., Margossian, H., Stevens, L., Full Robotic
- Assistance for Laparoscopic Tubal Anastomosis; First Case Report, Journal of Laparoendoscopic and Advanced Surgical Techniques, 1999; 9(1): 107-113.
- Butner, S.E., Ghodoussi, M., Wang, Y Robotic Surgery - The Transatlantic Case
- submitted for publication to 2002 IEEE International Conference on Robotics and Automation, Washington D.C.

## NEW BOOKS

NEW LAUNCH



The first practical  
"Tax and Legal Manual for Doctors"

Let this 'Tax and Legal Manual for Doctors' transform your current skills into a meaningful career.

## AUTHORS

Dr. Ravi Gupta, Arun Ahuja

## PROFESSIONAL ADVICE

Garish Ahuja

## FOREWORD

Dr. Parveen Bhatia

## MRP

Rs. 450/-

## PAYMENT

Cheque / Draft in favour of  
"Bravo Capital Services Pvt. Ltd."

## CONTACT

Bravo Publications  
53, Rajendra Bhawan,  
Rajendra Palace,  
New Delhi-110 008.

## Phone

51538486  
25763481

## email

bravo@latestindia.com

## GLOBAL DIGITAL SERVICES

Amit Mattoo; 307-308,  
Ambika Vihar, Paschim Vihar.  
New Delhi-110087

## Phone

25270701  
25270702  
25256408

OUR EXPERTS

- Laparoscopic Surgeon  
Dr. Parveen Bhatia, M.S.
- Dr. Jagpreet Deed, M.S., DNB, MRCS
- Dr. Bharat Bhasin, M.S., DIPL.S.
- Gynaecologist  
Dr. Indu Bhatia, M.D.
- G.I. Surgeon  
Dr. Adarsh Choudhary, M.S., FRCS
- Orthopedics  
Dr. A.P. Singh, M.S.  
Dr. Manoj Garg, M.S.
- ENT  
Dr. (Lt. Gen.) S. P. Malhotra, M.S.  
Dr. S. Kathuria, M.S.  
Dr. Ravinder Prakash, M.S.
- Eye  
Dr. Urmila Kashyap, M.S.  
Dr. J. S. Chilana, M.S.  
Dr. Rajiv Bajaj, M.S.
- Cardiothoracic Surgeon  
Dr. Anil Gupta, M.Ch.
- Neuro Surgeon  
Dr. Ajay Bhutani, M.Ch.  
Dr. Sushil Bhasin, M.Ch.
- Plastic Surgeon  
Dr. Kharbanda, M.Ch.
- Urologist  
Dr. S.K. Pal, M.Ch.
- Paediatrics  
Dr. Krishan Autar, M.D.  
Dr. Gopal Krishan Saini, M.D.
- Physician  
Dr. V.K. Goel, M.D.  
Dr. Ratan Pal, M.D.
- Cardiologist  
Dr. Pramod Kumar, D.M.
- Chest Physician  
Dr. Animesh Arya, M.D.
- Gastroenterologist  
Dr. Arvind Khurana, D.M.
- Skin  
Dr. Munish Paul, M.D.  
Dr. Amit Kalra, M.D.
- Psychiatrist  
Dr. Rajesh Nagpal, M.D.  
Dr. Prasad, M.D.
- Neurologist  
Dr. (Col.) R.M. Dhamija, D.M.
- Nephrologist  
Dr. Ashish Kalra, D.M.  
Dr. Deepak Jain, D.M.
- Hematologist  
Dr. Dinesh Jain, M.D.
- Oncologist  
Dr. P.N. Uppal, M.D.
- Rheumatologist  
Dr. Sanjiv Kapoor, D.M.
- Endocrinologist  
Dr. Arun Kumar, D.M.
- Diabetes & Thyroid  
Dr. B.M. Makkar, M.D.  
Dr. J. Mulchandani M.D., DNB
- Radiologist  
Dr. Saroj Singla, M.D.
- Ultrasound  
Dr. Nagar, M.D.
- Dr. Sachdev Vaswani, M.D.
- Dr. C.K. Raheja, M.D.
- Echo-Cardiologist  
Dr. Aneesh Sharma, M.D.
- Pathologist  
Dr. Rekha Khurana, M.D.
- Microbiologist, Dr. S.P. Singh, M.D.
- Anesthesist  
Dr. Mrs. Dhawan, M.D.  
Dr. Sandeep Chopra, M.D.  
Dr. Neeraj Jain, M.D.
- Dietician, Ms. Mridu Lamba
- Physiotherapist  
Dr. Prerna  
Dr. Shaveta Chawla

EVENT CALENDAR

LAPAROSCOPIC WEEK

November 18-25, 2004

Live Workshops & CME

1. Focus on "Hysterectomy" 19<sup>th</sup>  
Nov  
November 19, 2004 (Friday)
2. Focus on "Endo Hernia 2004" 20<sup>th</sup>  
Nov  
November 20, 2004 (Saturday)
3. Focus on "Urinary Stones" 21<sup>th</sup>  
Nov  
November 21, 2004 (Sunday)

Registration for each event

	Before 01-11-2004	After 01-11-2004	Spot
Residents	250/-	500/-	1000/-
Consultants	500/-	1000/-	1500/-

Registration for all events

Residents	700/-	1200/-	2500/-
Consultants	1200/-	2500/-	4000/-



Dr. Adarsh Choudhary delivering lecture on surgical management of pancreatitis



Dr. Parveen Bhatia speaking on Endoluminal Surgery For Pseudocyst Pancreas



Dr. Arvind Khurana speaking on stenting in Malignant Obstructive G.I. Diseases



Dr. Madaan releasing the book "Tax and legal manual for doctors"

CME on AIDS

August 8, 2004  
(Sunday, 7.00 pm onwards)



HIV and the surgeon

Dr. Nalin Nag  
Senior consultant  
Apollo Hospital  
New Delhi

Sponsored by  
Citadel aurobindo Biotech Limited

PHOTOGALLERY

Glimpses of CME on Chronic Pancreatitis

July 11, 2004 (Sunday)

**Rx the Single Shot solution**

Omeprazole 40mg vials

*Ensures Easy Recovery*

**Zydus**

Truly Once A Day

**Nucoxia**™

Eticoxib 120mg Tablets / Zydus Cadila

**The Pain Eraser**

**Zydus Cadila**

For further details please write to : Zydus Cadila, A division of Cadila Healthcare Ltd. "Zydus Tower", Satellite Cross Road, Ahmedabad 380 015, India. Phone : +91-79-26998 103 (20 Lines) Fax : +91-79-26962 370 www.zyduscadila.com

**Bhatia GLOBAL HOSPITAL AND ENDOSURGERY INSTITUTE**  
(MULTI-DISCIPLINARY MINIMALLY INVASIVE SURGI-CENTRE)

A symbol of excellence, commitment and dedicated patient care, established in July, 2001. The vision is borne out of a single-minded focus on providing world class minimally invasive surgery to patients in many super-speciality areas. All under one roof. No matter whether it's medical equipment, care facilities, or international associations... the perspective is global.

Empanelled with SAIL, IOC, NTC, NBCC, SBBJ Bank, Insurance Co., National, United India, Oriental, New India, LIC, Bajaj Allianz through TPA-Paramount, Medsave, Raksha, Famjily Health Plan, Gennis, E-Meditek, Alankit Health Care, TTK Health Care etc.

Registered with Registrar of News Paper Vide Registration No.: RNI-DELENG/2001/6114 and Postal Deptt Vide: DL-17014/2003-05

Printed, published and owned by Dr. Parveen Bhatia and printed at Hindustan Offset Press: A-26, Naraina Industrial Area, Phase-II, New Delhi - 110028. Phone: 2-5705629 and published at 307 & 308, Ambica Vihar, New Delhi - 110087. Editor: R. S. Bhatia