



globalnewsletter

BHATIA GLOBAL HOSPITAL & ENDOSURGERY INSTITUTE NEWSLETTER

VOL: 08 NO: 9

PRICE: Rs. 4/- PER COPY

SEPTEMBER, 08

Patience

A Persian folktale called “Marvarid” (The Pearl) high-lights the virtue of patience that sadhus, bhikshus, hermits and sufis achieved.

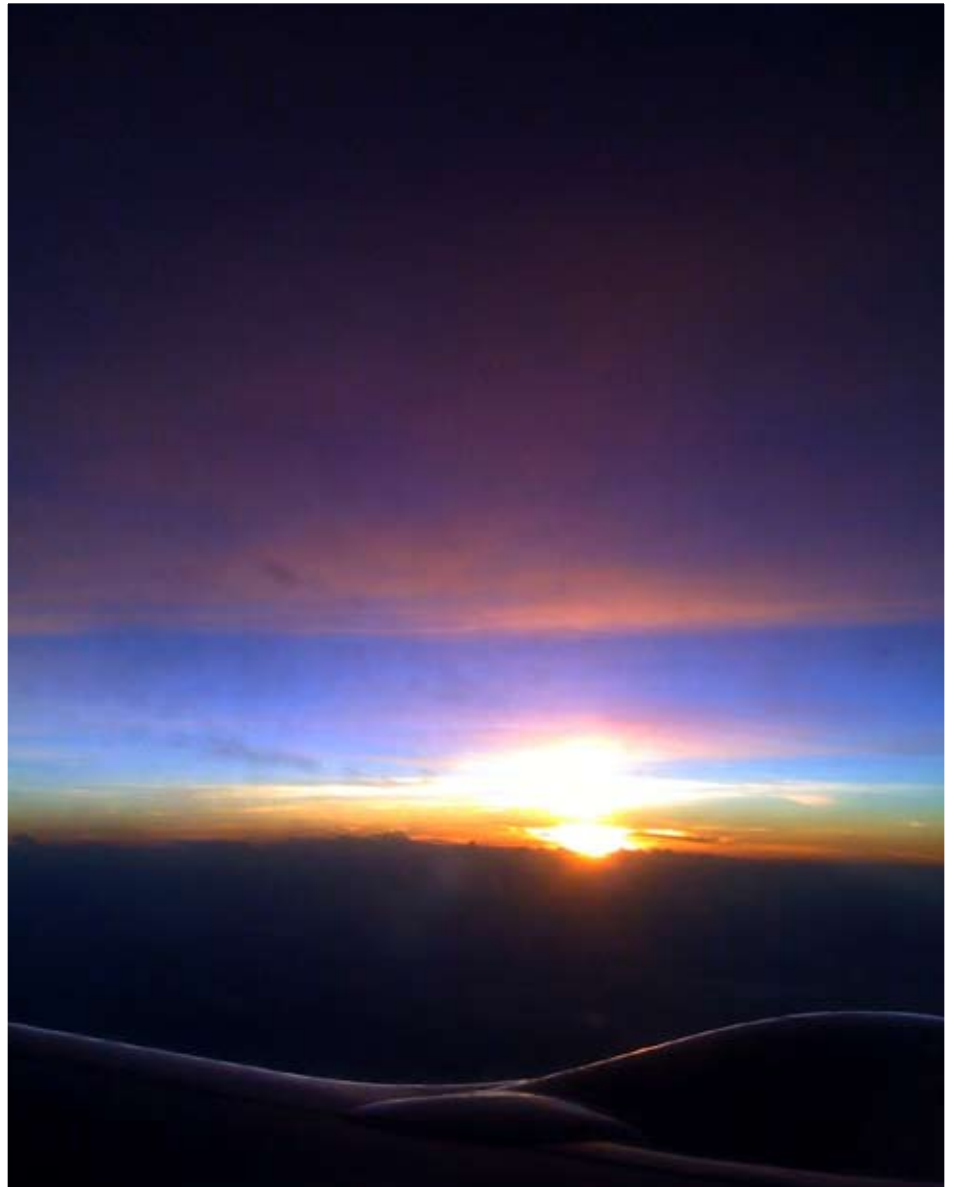
A poor god-fearing man and his wife earned their livelihood by spinning cotton into thread and selling it in the market. One day, as the man came home from the market, he met a friend who was in dire need. The good man gave his day's earning to his friend and went home empty-handed. His wife said that since there was no food in the house and no cotton either for the next day, he could take the only things they had, an earthen pot and a broken dish, to sell. The man took these to the market but found no buyers. He turned sadly to go when he saw a fisherman passing by with a fish to sell. The fisherman said, “Since no one is buying my fish or your articles, why don't we exchange our goods?”

The grateful man took the fish home and his wife cut it up to cook. To her surprise she found a pearl inside. But her husband said “If there is a hole in this pearl, then it belongs to someone else and we will look for the owner, but if there is no hole, then God had sent it for us.” Not finding a hole, he took it to a jeweller. It turned out to be a rare pearl and the good man sold it for enough money to live comfortably thereafter.

As he went home, he passed a starving beggar. When the beggar asked him for money, he was moved and said, “Brother, I was also in your state some time ago, but now you can have half my money.”

As he gave the money to the beggar, an angel appeared in his place who said, “ God was testing your patience and generosity, take the money and live in peace.”

R. S. Bhatia



“The horizon is not what one sees. It is what one seeks.”

“Keep cool and you command everybody.” - Louis de Saint

EDITORIAL BOARD

Mr. R. S. Bhatia, Dr. Parveen Bhatia, Dr. Indu Bhatia, Dr. Sandeep Chopra, Sanchit Bhatia

AN ERA OF SURGICAL MINIMALISM: MOVING TO “SINGLE PUNCTURE ACCESS” (SPA) LAPAROSCOPY

Dr. Parveen Bhatia, *Consultant Laparoscopic Surgeon & Medical Director*

INTRODUCTION:

A new era of laparoscopy has arrived, with the potential for scarless surgery. Standard rules for laparoscopic surgery are being challenged to allow parallel insertion of multiple instruments and scope through a single port.

Although NOTES (Natural orifice Transluminal Endoscopic Surgery), in which access is gained through the stomach, vagina or rectum, is in its experimental phase, the use of the umbilicus (an obliterated embryonic natural orifice) as a point of access is ready for clinical “prime time.” Single-port laparoscopy through the umbilicus provides safe access to perform embryonic (for umbilical access) NOTES or E-NOTES.

It is an advanced minimally invasive surgical procedure in which the surgeon operates almost exclusively through a single entry point, typically the patient’s umbilicus. SPA (Single port access) surgical procedures are like many laparoscopic surgeries in that the patient is under general anesthesia, insufflated and laparoscopic visualization is utilized. Since the entire surgery is performed through the umbilicus, it does not leave any visible scar like a traditional multi-port laparoscopic approach. Surgeons employing this technique contend that patients should benefit from less post-operative pain, less blood loss, faster recovery time, fewer complications, and better cosmetic results.

TABLE-I : ALTERNATIVE NOMENCLATURE:

Single port access (SPA™) surgery.

1. Single Incision Laparoscopic Surgery (SILS™).
2. One port Umbilical Surgery (OPUS).
3. Natural Orifice Trans Umbilical Surgery (NOTES™).
4. Single-Port Transumbilical Laparoscopy.

5. Embryonic natural orifice Transumbilical Endoscopic Surgery (E-NOTES).
6. One Port Laparoscopy.
7. Single Access Endoscopic Surgery.

HISTORY:

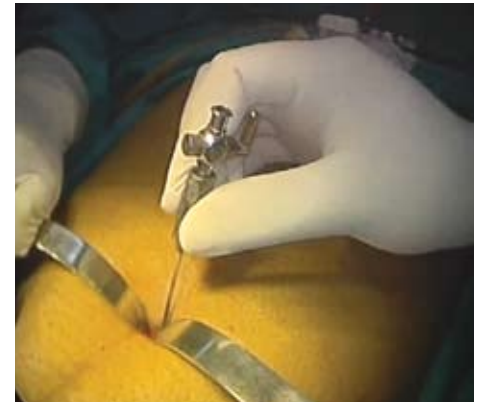
Single port/ single incision surgery has evolved rather quickly. In May, 2007, Dr. Paul G. Curcillo from Drexel University College of Medicine, Philadelphia and Dr. Stephanie A. King, Gynaecologist developed Single Port Access (SPA) technique for gall bladder removal, total laparoscopic hysterectomies and ovary removal. They developed a minimal access surgical technique performing the entire procedure through a single incision <2 cm. The procedures performed at Drexel University have been accomplished entirely through the umbilicus without the need for additional transabdominal sutures or suture traction placed through the gallbladder or through other sites in the abdominal wall as many of these prior reported procedures have required. Dr. Inderbir S. Gill from Cleveland clinic has removed donor kidneys through single belly button incision by laparoscopic method.

Single Port ‘first ever’ laparoscopic Nephrectomy was performed by Dr. Jeffrey Cadeddu, Associate Prof. of Urology and Radiology at UT southwestern Medical Centre in Dallas, TX.

In May, 2007, Novare announced the ‘first-ever’ Single Incision Lap Cholecystectomy. Adoption of the approach is occurring at a remarkably fast pace and an announcement was again made in December 07’, citing the 100th single port surgery performed with RealHand HD (High dexterity) instruments. These ‘hidden scar’ procedures require a single skin incision, and are performed entirely through the patient’s belly button, either with a single larger trocar or several smaller ones. The goal is to reduce

post operative pain, speed recovery and improve cosmetic results for the patient.

TECHNIQUE: OF SINGLE PORT ACCESS (SPA) LAPAROSCOPIC CHOLECYSTECTOMY



1. Intra umbilical (10mm) incision is given and skin is retracted by S-shaped retractors



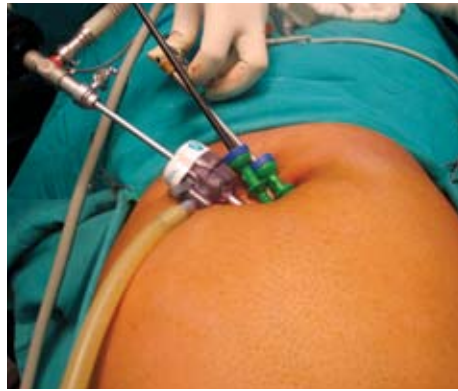
2. ‘Plunger test’ on veress needle confirms its intra peritoneal placement by free flow of saline



3. Pneumo peritoneum created



4. Rectus sheath is visualized



8. 5mm 30° scope is being used and 2 ports are used for retraction & manipulation



12. Cystic duct and artery dissected and clipped using 5mm disposable clip applier



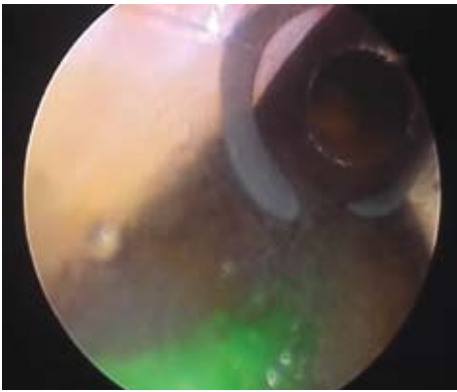
5. First 5mm visi-port is placed intra umbilicus



9. Gall bladder seen with 5mm 30° scope



13. Gall bladder dissected away from liver bed and delivered out through umbilicus



6. Through transparent canula, the entry of second green 5mm trocar insertion seen



10. Adhesions seen



14. Gall bladder with stones



7. Total of 3 (5mm) ports placed intra umbilicus



11. Cystic duct and artery dissected and clipped using 5mm disposable clip applier

INSTRUMENTATION OF THE PRESENT

Same standard rigid instruments are being used as in laparoscopic cholecystectomy.

INSTRUMENTATION OF THE FUTURE

The two main components for these instrumentation are the port and the surgical instruments. The port holds open the incision and provides an air tight environment for the graspers and scope. Two companies that manufacture these ports are Advanced Surgical Concepts, which makes the R-port,

and Pnave Systems, which makes Uni-x. Two companies that manufacture the surgical instruments are Novare Surgical, which makes RealHand and Cambridge Endo, which makes Autonomy Laparo-Angle.

- RealHand HD® (High dexterity) instruments.
- ASC (Advanced surgical concepts) R-Port laparoscopic Access: The R port is a single port that allows the ingress of multiple instruments through a single channel.

TABLE-II : PROCEDURES ALREADY DONE BY SINGLE PORT ACCESS TECHNIQUE:

General Surgery

Single Port

Lap Chole	Lap Nissen
Lap Band	Lap Colectomy
Lap Splenectomy	Lap Appendectomy
Lap Heller Myotomy	Lap Hernia
Lap Adrenalectomy	Lap gastric tube placement
Lap. Liver Resection	

GYN Surgery

Single Port

Total Lap Hysterectomy (TLH)	Lap Nephrectomy even donor nephrectomy
Subtotal Lap Hysterectomy	Lap Prostatectomy
Lap Oophorectomy	Lap Pyeloplasty
Lap Fibroid Excision	
Lap Cyst Excision	

Urology

Single Port

TABLE-III: WHY A SINGLE PORT/ SINGLE INCISION APPROACH?

Potential advantages for the patient:

1. Less post-op pain: fewer painful abdominal sticks
2. Quicker recovery: less pain and fewer incisions
3. Better cosmetic results: scar is hidden in the umbilicus

Potential advantages for the surgeon:

1. Enhanced approach
 - a. Reduced chance of port-site infection
 - b. Reduced incidence of ventral hernia
 - c. Reduced incidence of trocar-related injury
2. A more comfortable and ergonomic approach
 - a. Less arm movements
 - b. Operate from the same plane
3. Grow the surgical practice
 - a. Hidden scar surgery is attractive to patients

Potential advantages for the hospital:

1. Cost savings

FUTURE:

Flexible laparoscope and instruments are being developed for NOTES and Trans umbilical surgery. Japanese have made 'Radius' surgical system: a mechanical manual manipulator with deflection and rotation of the tip (copying the Endowrist® of Robotic surgery).

CONCLUSION:

Single port access attempts to further enhance cosmetic benefits and reduce morbidity of

RNI NO.: DELENG/2001/6114
REGD. NO.: DL(W) 10/2076/06-08
LICENSED TO POST WITHOUT
PRE-PAYMENT: U(W)-38/2006-08
 Posted on 21st / 22nd of every month

minimally invasive surgery. As this field is poised to move forward, a complete understanding of its evolution and current status is timely. Single puncture laparoscopy has made its initial forays into laparoscopic surgery. Ongoing refinement in technique and instrumentation is likely to expand its future role.

REFERENCES:

1. Navarra G, Pozza E, Occhionorelli S, Carcoforo P, Donini I. One-wound laparoscopic cholecystectomy. Br J Surg. 1997 May; 84(5):695
2. Esposito C. One-trocar appendectomy in pediatric surgery. Surg Endosc. 1998 Feb;12(2):177-8.
3. Piskun G, Rajpal S. Transumbilical laparoscopic cholecystectomy utilizes no incisions outside the umbilicus. J Laparoendosc Adv Surg Tech A 1999; 9:361-364
4. Bresadola F, Pasetto A., et al Elective Transumbilical Compared with Standard Laparoscopic Cholecystectomy. European J of Surg. 1999 Feb; 165(1): 29-34(6)



Dr. Parveen Bhatia with Dr. Paul G. Curcillo

BHATIA GLOBAL HOSPITAL AND ENDOSURGERY INSTITUTE

(MULTI-DISCIPLINARY MINIMALLY INVASIVE SURGI-CENTRE)
 SPECIALIZED CENTRE FOR LAPAROSCOPY,
 INFERTILITY AND OBESITY SURGERY

305, 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
 bhatia_global@yahoo.co.in,
 bhatia_global@gmail.com

Design Credits: i Links 'n' Grafix Pvt. Ltd.; 011-45564387, 9873066683; www.ilng.in

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.

WEBSITES
 BhatiaGlobalHospital.com
 BhatiaEndoSurgery.com

ISDN lines: 6
 011-42334011, 13, 15, 17,
 42334657, 42334673

REGISTRATION NO
 2006-2007/512
 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

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: 25705629 and published at 307 & 308, Ambika Vihar, New Delhi-110087. Editor: R.S. Bhatia