



BHATIA GLOBAL HOSPITAL & ENDOSURGERY INSTITUTE

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EDITORIAL

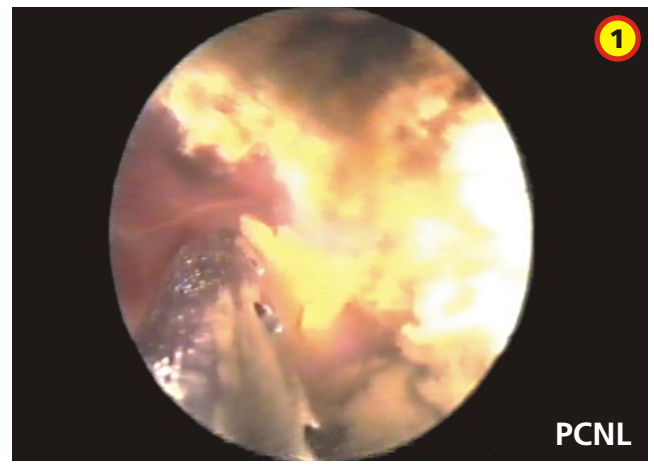
'There cannot always be fresh fields for conquest by the knife; there must be portions of the human frame that will ever remain sacred from intrusion at least in surgeon's hands.'

- John Ericson, 1873.1

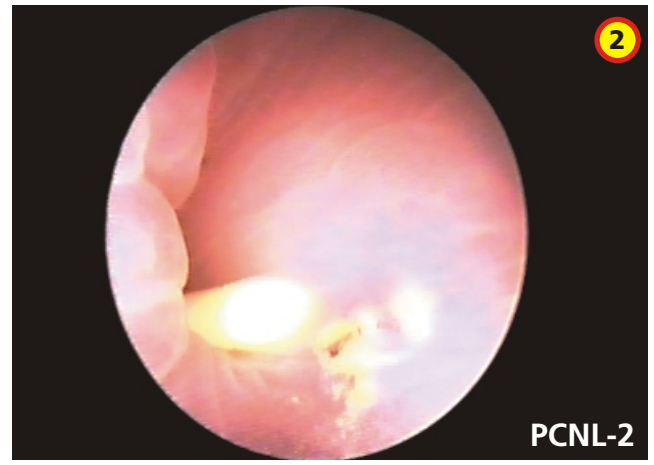
Our February newsletter carried the main article on Retroperitoneal and Extraperitoneal Laparoscopy. This we hoped, would be a forerunner of better things to come. Our current newsletter is focused on **'Laparoscopic Pyelolithotomy'**. We hope that this will be a good warm up to the *May 11th (Sunday), 3rd LIVE WORKSHOP & CME – "FOCUS ON URINARY STONES"*. It will be our effort to cover this common affectation in a comprehensive manner. Thus this workshop will entail live (demonstrations) experts, equipment and efforts in the shape of – Laparoscopic Pyelolithotomy / ureterolithotomy, Ureteroscopic (URS; rigid and flexible; adjunctive Holmium laser use too) stone removal and Percutaneous nephrolithotomy (PCNL).

We, therefore, request you to reserve this important date - May 11th (Sunday), in your busy schedules to enable us to narrow the gap between newer technology and real time practice! Your participation will significantly contribute to this educational feast and provide moments of lively and interactive debates. We look forward to meeting you on this academic day!

R.S. BHATIA



PCNL



PCNL-2

"Globalise or regress, there is no midway!"



ARTICLE-1

LAPAROSCOPIC PYELOLITHOTOMY

DR. PARVEEN BHATIA,
Medical Director &
Laparoscopic Surgeon

DR. SUVIRAJ J. JOHN,
Surgical Associate.

“I will not cut even for the stone, but leave such procedures to practitioners of that craft”.

-Hippocrates

The last century has seen a radical change in the management of renal calculi. First bladder calculi are less common and there has been a marked increase in the incidence (UK- 600-1000%) of renal calculi². Secondly and probably of more importance, is the fact that most (up to 95%) renal calculi today are managed by less invasive therapies (namely Extra Corporeal Short Wave Lithotripsy – ESWL, Per Cutaneous Nephrolithotomy – PCNL and Uretero Renoscopy- URS). Only 2-4%^{4,5} of renal calculi are managed by conventional open surgery, in the present day scenario. This fortunate turn of events has been good for patients who no longer have to dread an operative procedure for ‘stones’. Adding to this advantage of less invasive therapies, comes the advent of laparoscopic (read ‘retroperitoneoscopic’) removal of renal calculi which tomorrow might replace conventional open surgery for almost all patients for whom open surgery was indicated. Knowing that nephrolithiasis is a commonly prevalent disease (life time risk – 3-15% [West]³), especially in Northern India, the number of patients coming for surgical management continues to be significant despite accounting for the fact that most small calculi would pass spontaneously. Thus we believe it is incumbent on the surgeon who was traditionally comfortable with his ‘open’ skills to re-orient himself to this added advantage of laparoscopic removal of renal calculi. This, in most cases, would mean a ‘Retroperitoneal (Laparoscopic) Pyelolithotomy or Ureterolithotomy’. Laparoscopic Anatomic Nephrolithotomy has been successfully accomplished in an animal model⁶. The following document provides a basic background to this issue.

Doing us proud again Dr. D.D. Gaur in 1994 reported the first retroperitoneal laparoscopic pyelolithotomy⁷. Since then, this procedure has come a long way!

1. Today this procedure is standardized, safe and reproducible.
2. It has also been found to be effective and efficient without an associated increase in the complication rate!
3. Furthermore laparoscopic Pyelolithotomy is feasible when combined with pyeloplasty. Here again the results are comparable to those of open surgery and the advantages of open surgery are maintained in this approach along with decreased post-operative morbidity!

Indications

Today Laparoscopic pyelolithotomy is indicated where open surgery was indicated. Namely⁹-

- Complex (eg. Staghorn calculus) and large (multiple calculi) stone burden, which are not fit for ESWL, PCNL or URS.
- Where less invasive (ESWL, PCNL or URS) have failed.
- Where concomitant outflow obstruction exists.
- Symptomatic calculi in complex calyceal diverticulae
- Ectopic kidneys.

Contraindications

Probably the only contraindication for laparoscopic management (nephrectomy) of renal calculi is in the setting of xanthogranulomatous pyelonephritis where this approach is plagued by renal scarring and operative time is longer and morbidity greater¹⁰.

Issues that need to be addressed:

1. Expertise

Certainly this procedure and approach has a significant learning curve. As in any procedure fundamental concepts need to be appreciated first! We hope to address this issue successfully in a preliminary fashion in our upcoming ‘Workshop’.

2. Economy

With the widespread availability of laparoscopic equipment for gall bladder stone disease, employing this readily available infrastructure for renal stone disease is attractive!!

3. Renal sparing nature

Proponents of surgery have claimed the putative nephron-sparing and renal function saving advantages of surgery over PCNL⁸ and ESWL respectively.

In the May 11th (Sunday), 3rd LIVE WORKSHOP & CME – “FOCUS ON URINARY STONES”, we will be dealing in depth with the laparoscopic interventions for urinary stones. We hope this article served as an appetizer for your clinical intellect. ■

APR '03

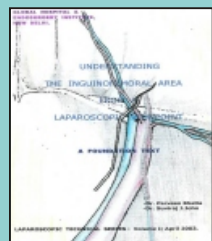
Vol. 3

No.4

Introducing CD-ROM on

Understanding The Inguinofemoral Area From A Laparoscopic Viewpoint: A Foundation Text With Coloured Atlas

Dr. Parveen Bhatia
Dr. Suviraj J. John



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ARTICLE-2

PREVENTING STONE RECURRENCE

'An Innovative Use of Rigid Cystoscope in Laparoscopic Pyelolithotomy'

The natural recurrence of urinary stones is 10-15% at 1 year and 4-50% at 4 years¹¹. The main risks are large stones, multiple stones, cystine or calcium phosphate stones, reduced renal clearance (e.g. hydronephrosis, horse-shoe kidney) and residual stones. Residual stones although they may be passed up to 3 years post-treatment, increase recurrence rates by up to 300%¹². Thus it is a logical therapeutic imperative to render patients stone free.

It is crucial to appreciate two facts when it comes to understanding current day surgical stone treatment when one aims to reduce the incidence of stone recurrence!

1. Indications for Surgery tend to predispose to stone/ fragment retention-This occurs by virtue of the characteristic of the stone burden – eg. stones for salvage therapy (post ESWL, PCNL or URS stones, which are already fragmented heterogeneously into numerous if not countless fragments) and complex stone burden (multiple/ large stones, giant stag-horn). This also occurs on account of outflow system characteristics (ectopic kidney, complex calyceal diverticulae, severe infundibular stenosis, concomitant uretero-pelvic junction obstruction) which predispose to fragment retention.
2. 'Laparoscope' aided visualization of the pelvi-calyceal system 'per se' is sub-optimal- It is thus incumbent that an added modality of visualization be used to aid in the optimal visualization of the pelvi-calyceal system with a view to render the patient stone free.

This can be accomplished by a number of modalities.

a. Flexible Nephroscope/ Cystoscope

This would be the ideal as they provide a larger viewing angle (250 degree), are manoeuvrable and prevent torque. This however has to be weighed against a very high capital cost, short therapeutic life and the fact that it is not widely available.

b. Rigid Cystoscope

We introduce the innovative use of the Rigid Cystoscope for visualisation of the pelvi-calyceal system at laparoscopic pyelolithotomy. The Rigid Cystoscope is placed co-axially inside an indigenously designed sheath. This can be placed through a 5mm port. Stones are grasped and extracted with graspers introduced through accessory ports. Stone/ fragment extraction is thus done under vision. This arrangement has already been used successfully in the laparoscopic exploration of the common bile duct and extraction of CBD stones in the setting of choledocholithiasis.

Advantages

1. Widely available.
2. Cheaper.
3. Sturdier.

Disadvantages

1. Limited viewing in comparison to a flexible scope. Maximum viewing with a rigid cystoscope is 70 degrees.
2. Torque can come into play when the stone is not easily reachable.

CONCLUSION

Recognising the fundamental role of residual stones/ fragments in the formation of recurrent urinary stones we recommend the routine use of an adjunctive modality to visualize the pelvi-calyceal system at laparoscopy to detect and assist in the extraction of kidney stones. This adjunctive modality now can be made widely available. The dependable, sturdy Rigid Cystoscope (ensheathed in an indigenously designed sheath) is a cost-effective, useful alternative to the flexible viewing scopes.

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EVENT CALENDAR

1. HERNIA – CONTROVERSIES TO CONSENSUS

(CME cum WORKSHOP)

26th and 27th April, 2003

at the

All India Institute of Medical Sciences (AIIMS).

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NEWS FLASH

1. 'FOCUS ON URINARY STONES'

- Uretero Renoscopy (URS)
Flexible
Rigid

- Percutaneous Nephro Lithotomy (PCNL)

- Laparoscopy

- Retroperitoneoscopic surgery

- Microperc

MAY 11, 2003

OUR EXPERTS

Paediatrics

Dr. Krishan Autar, M.D.
Dr. Gopal Krishan Saini, M.D.
Dr. Ashish Garg, M.D.

Physician

Dr. V.K. Goel, M.D.
Dr. Ratan Pal, M.D.
Dr. S.K. Verma, M.D.

Diabetes & Thyroid

Dr. B.M Makkar, M.D.
Dr. J. Mulchandani M.D., DNB

Cardiologist

Dr. Pramod Kumar, D.M.

Cardiothoracic Surgeon

Dr. Anil Gupta, M.Ch.

Chest Physician

Dr. Animesh Arya, M.D.

Gastroenterologist

Dr. Arvind Khurana, D.M.

Skin Prof. V.N. Sehgal, M.D.

Dr. Munish Paul, M.D.

Neurologist

Dr.(Col.) R.M. Dhamija, D.M.

Endocrinologist

Dr. Arun Kumar, D.M.

Rheumatologist

Dr. Sanjiv Kapoor, 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.

Psychiatrist

Dr. Rajesh Nagpal, M.D.

Dr. Prasad, M.D.

Surgeon

Dr. Parveen Bhatia, M.S.

Urologist, Dr. S.K. Pal, M.Ch.

Gynaecologist

Dr. Indu Bhatia, M.D.

Plastic Surgeon

Dr. Kharbanda, M.Ch.

Neuro Surgeon

Dr. Ajay Bhutani, M.Ch.

Dr. Sushil Bhasin, M.Ch.

Orthopedics

Dr. A.P. Singh, M.S.

Dr. Manoj Garg, M.S.

Dr. Rajesh Arora, M.S.

Dr. Raj Kumar, M.S.

Arthoscopist, Dr. Arya

Physiotherapist, Dr. Prerna

ENT, Dr. S. Kathuria, M.S.

Dr. Ravinder Prakash, M.S.

Dr. Rajeev Sharma, M.S.

Eye, Dr. J.S. Chilana, M.S.

Dr. Bajaj, M.S.

Radiologist

Dr. Saroj Singla, M.D.

Ultrasound

Dr. Nagar, M.D.

Dr. Sachdeva 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.

Anesthetist

Dr. Mrs. Dhawan, M.D.

Dr. Sandeep Chopra, M.D.

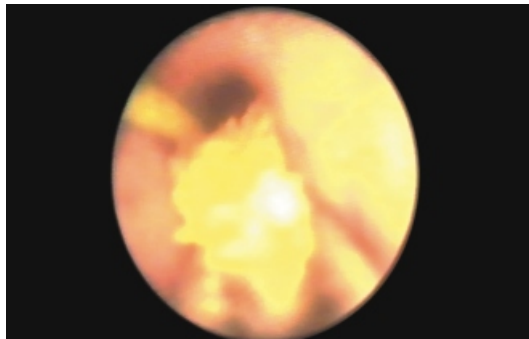
Dr. A.N. Ganguly, M.D.

Dietician

Mrs. Joshi

PHOTO GALLERY

Uretero Renoscopy - URS

**3rd LIVE WORKSHOP & 16th CME**

ON

"FOCUS ON URINARY STONES" - 'A TECHNICAL WORKSHOP'

MAY 11th, 2003 (SUNDAY) 8.00 A.M. ONWARDS

DEVIL LIES IN THE DETAILS

- Retroperitoneoscopic Pyelolithotomy
- Retroperitoneoscopic Ureterolithotomy
- Percutaneous Nephrolithotomy (P.C.N.L.)
- Ureterorenoscopic Surgery (U.R.S.) - Flexible, Rigid
- Mini Perc
- Laser Surgery

REGISTRATION

	Before 05-05-2003	After 05-05-2003
Residents	Rs. 250/-	Rs. 500/-
Consultants	Rs. 500/-	Rs. 750/-

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Delegates desirous of presenting video should send details

All are cordially invited

VENUE

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