

## New Operative Techniques Developed

### 1992

1. Extracorporeal shock wave lithotripsy (ESWL) is one of the major developments in Urology. A **original technique** had been evolved in 1992 for facilitating the ESWL of calculi located in lower ureter using **modified prone position**. The technique was published in **British Journal of Urology** in 1992, 70: 456-457.
2. For the patients undergoing total penectomy for carcinoma penis, a technique of making "Nipple" like end urethrostomy was developed which allowed them an upright micturation. This was published in **British Journal of Urology** 1992, 70:576-577. <https://www.ncbi.nlm.nih.gov/pubmed/1467874>

### 1993

3. Percutaneous removal of kidney stones is now an established method of stone removal. Many a times residual stones were left inside the kidney. I along with Dr. R. Ahlawat developed a totally **novel method** which was not only simple and effective but also reduced patients' morbidity and cost of treatment. We labeled our technique as **IPCI (Intraoperative Percutaneous Calyceal Irrigation)**, presented it in the 10th World Congress of Endourology and ESWL at Singapore in 1992 and thereafter published it in **British Journal of Urology** in 1993, 72: 990. <https://www.ncbi.nlm.nih.gov/pubmed/8306185>

### 1999

4. The performance of urethroplasty for Post urethral distraction defect is a challenging operation because of inappropriate access of posterior urethra. I developed a simple technique of '**Digital pushdown of Prostate**' to improvise the access of urethra and the same was published in **Indian J. Urology** in 1999. <http://www.indianjurol.com/showstats.asp?issn=0970-1591;year=1999;volume=15;issue=2;month=January-June>

### 2000

5. Large prostate glands are very common in rural India and transvesical prostatectomy is a common operation. I devised a technique called **Transurethral circumapical incision of prostate (TUCIP)** for minimizing sphincteric injury during transvesical prostatectomy for large prostates and published it in **Brit. J. Urology** in 2000; 996-997. <https://europepmc.org/abstract/med/10792184>

### 2002

6. For cases of small and/or residual vesicovaginal fistula, I have evolved a original technique **Transvaginal electrocauterization along with submucosal injection of autologous blood** which was published in **BJU international** in 2002, 89:1-3
7. A **new `technique` of filling post pubectomy dead space by paratesticular tissue** was developed and published: *Paratesticular fibro adipose tissue flap: An alternate for post pubectomy dead space obliteration*. **Brit. J. Urol**, 2002, 89:1-2.

## 2004

8. **A technique on “Omental wrap of renal pedicle”**- A new step to minimize the recurrence of chyluria following pyelolymphatic disconnection has been developed by me and published in **B.J.U. International** Sep 2004; 94 (4): 673-4. This technique has also been cited in Campbell Text Book of Urology. DOI:10.1111/j.1464-410X.2004.05021.x <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1464-410X.2004.05021.x>
9. The performance of PCNL usually requires general anesthesia which adds cost and morbidity to our poor patients. I have developed **a technique** called “**Renal Capsular Block**” for performing PCNL under local anesthesia. The technique has been presented in National conference of USI in the section of innovations and later published in **J. Endourology**, 2004; 18 (6): 544-6. This technique has been cited in latest edition of Campbell textbook of Urology. DOI:10.1089/end.2004.18.544 <https://www.ncbi.nlm.nih.gov/pubmed/15333218>

## 2006

10. **A new technique** has been developed by me to enhance the clearance rates during PCNL called “**Guidewire Assisted Infundibular Tilt**” (**GAIT**). A presentation of this technique has been made in 22<sup>ND</sup> World Congress on Endourology & SWL, 02 – 05 November 2004 Mumbai - India and later published in **J. Endourology** 2006, 20 (9) DOI:[10.1089/end.2006.20.620](https://doi.org/10.1089/end.2006.20.620) <https://www.ncbi.nlm.nih.gov/pubmed/16999611>
11. I have also published some technical modifications of original O' Connor's technique to repair the vesicovaginal fistula by suprapubic route - *Supratrigonal VVF Repair by modified O' Connor's Technique: An experience of 26 Cases*. **European Urology** 49 (2006) 55-55 doi:10.1016/j.eururo.2005.12.037 [https://www.europeanurology.com/article/S0302-2838\(05\)00857-2/pdf](https://www.europeanurology.com/article/S0302-2838(05)00857-2/pdf)

## 2007

12. I described a new operative step called '**Scrotal hitch**' to prevent apical necrosis of scrotoperineal flap for urethroplasty and the same got published in **International Urology and Nephrology** in 2007. DOI 10.1007/s11255-006-9007-7 <https://link.springer.com/article/10.1007%2Fs11255-006-9007-7>

## 2008

13. I developed a new surgical step – '**Balloon Distension of Scrotum**' to create subdartos pouch during orchiopexy in children. The same got published in **Paediatric Surgery International** in 2008. DOI:10.1007/s00383-008-2111-2 <https://www.ncbi.nlm.nih.gov/pubmed/18259763>
14. The use of double dartos wrap flap for reconstruction of hypospadias has been modified by us. A paper on “**Limited**” **double dorsal dartos flap coverage**: An effective alternative to conventional flap coverage of the neourethra following Mathieu repair for subcoronal hypospadias has been published in *Int. Urol Nephrol* 2008 March 5. doi: 10.1007/s11255-008-9354-7 <https://www.ncbi.nlm.nih.gov/pubmed/18320341>
15. We developed a surgical method to **harvest buccal mucosa graft for urethroplasty under local anaesthesia only** and then published our technique in **Urology** in 2008. DOI: 10.1016/j.urology.2008.04.047 [https://www.clinicalkey.com/service/content/pdf/watermarked/1-s2.0-S0090429508005372.pdf?locale=en\\_US](https://www.clinicalkey.com/service/content/pdf/watermarked/1-s2.0-S0090429508005372.pdf?locale=en_US)

## 2010

16. A **new operation** has been developed to better manage bulbar urethral strictures: **Ventral Bulbar Augmentation (VBA): a technique to enhance support of Buccal mucosal graft placed ventrally for proximal bulbar urethral strictures**. This video of the technique was presented in Societe Internationalis Urologie at Paris, 2007. A paper on the same has been published in **Urology** 2010; 7(2): 115-119. <https://www.ncbi.nlm.nih.gov/pubmed/20535699>
17. A new surgical step in performance of No Scalpel Vasectomy of “**Distal Vasal Flushing**” was innovated by us and a **pilot experience with this step to achieve early azoospermia after No Scalpel Vasectomy was published in Urology in 2010**. doi:10.1016/j.urology.2010.01.091 <https://www.ncbi.nlm.nih.gov/pubmed/20451972>

## 2011

18. I was part of the team to have **developed a midline scroto-perineal approach for improving urinary continence in patients of exstrophy bladder**. The same was published by us in **u r o l o g y** in 2011. DOI: 10.1016/j.urology.2010.12.086 <http://europepmc.org/abstract/med/21550650>

## 2012

19. I developed a **method to dilate suprapubic tract over the preexisting suprapubic catheter to access the urinary bladder percutaneously**. This technique was released as video by **Endourology part B video Urology** in 2012, DOI: 10.1089/vid.2012.0045. <https://www.liebertpub.com/doi/abs/10.1089/vid.2012.0045?id=abstract.pdf&type=media&journalCode=vid>
20. I developed a simple way to **cystoscopically remove two DJ Stents simultaneously in one go**. This was published in **Journal of Surgical Technique and case report** as a new surgical technique in 2012 DOI: 10.4103/2006-8808.110273 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3673361/>

## 2013

21. I innovated a new surgical step called '**Anterior vesical hitch**' during percutaneous surgery inside urinary bladder to prevent sagging of anterior bladder wall. This technique was published in **Journal of Paediatric Urology** in 2013, doi.org/10.1016/j.jpuro.2012.10.006. <https://europepmc.org/abstract/med/23103211>
22. I described use of '**two amplantz sheaths**', for successful and repair removal of bladder stone in adult females. The same was published in **Journal of Surgical Technique and case reports** in 2013. doi:10.4103/2006-8808.128757 <https://www.ncbi.nlm.nih.gov/pubmed/24741433>
23. I described a new precautionary surgical step to **prevent placement of suprapubic catheter tip in prostatic urethra during trocar cystostomy**. This was published in **Journal of Surgical Technique and case reports** in 2013. doi: 10.4103/2006-8808.118634 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3889010/>
24. I described **use of antegrade cystoscopic assistance during anastamotic urethroplasty in females**. This was published in **Journal of Surgical Techniques and case report** in 2013. DOI: 10.4103/2006-8808.128758 [http://www.jstcr.org/temp/JSurgTechCaseReport52113-1041222\\_025332.pdf](http://www.jstcr.org/temp/JSurgTechCaseReport52113-1041222_025332.pdf)

## 2014

25. I was part of a team to have described **'testicular rerouting'** during orchiopexy without dividing the inferior epigastric artery. We published our technique in **Journal of Paediatric Surgery** in 2014. doi: 10.1016/j.jpedsurg.2013.12.017. <https://www.ncbi.nlm.nih.gov/pubmed/25092097>

## 2015

26. I developed a new surgical technique called **V-Flap Circumcision** for adults. A video has been uploaded on you tube July, 2015. <https://www.youtube.com/watch?v=Kd1XZF0cv-8>

## 2016

27. I described a **technical precautionary step of tugging out the urethral foley balloon to prevent intraurethral migration of guide wire during antegrade stenting**. This was published in **BMJ Case Reports** in 2016. doi: 10.1136/bcr-2016-214921 <https://www.ncbi.nlm.nih.gov/pubmed?term=26951444>
28. I described a new Flap - **W-V Flap: a new procedure for Distal Urethral Reconstruction in Females**. The same was published in **BMJ Case Reports** in 2016. A video of the same was also shown in AUA in 2016. doi:10.1136/bcr-2016-215309. <https://www.ncbi.nlm.nih.gov/pubmed/25092097>

## 2017

29. I developed a **new method of doing a safe suprapubic cystostomy in females using transurethral bougie guidance**. The technique has been published in Urology in 2017. A video of the same has been uploaded on you tube in 2018.
30. I have developed a **new & simple method of removing foley catheter impacted in bladder due to non-deflation of balloon**. A video of the technique has been presented in NZUSICON in 2017. A paper on this has already been written and is in process of submission.

## 2018

31. Currently, I am working on developing a **surgical technique of 'Omega Pubectomy'** for improving access of posterior urethra during urethroplasty for posterior urethral distraction defect. A paper on it has already been written and in process of submission.
32. I have recently developed a transurethral technique to burst the impacted balloon of foley catheter using a TURP resectoscope sheath and a long needle. A video of the technique has been presented in **North Zone Chapter USI** conference held at Meerut 2017. A paper on the same has been submitted for publication.