

CENTER FOR RECONSTRUCTIVE URETHRAL SURGERY



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Pre-37th SIU

SEMI-LIVE Surgery

Workshop on Genitourethral Reconstruction

Venue: SANA Lisboa Hotel

OCTOBER 17-18, 2017



**Lessons learned during my three-
decade (1978 - 2017)
journey around and inside the
urethra in 3.400 patients
(5.160 surgical procedures)
(346 (10%) failures)**



Sava Perovic



George D. Webster



Jack W. Mc Aninch

How to decrease and avoid complications in urethroplasty

Avoiding infection



Centro Chirurgico Toscano
Arezzo – Italy

www.centrochirurgicotoscano.it



Pre-operative urine culture

Negative

Cephalosporin: 2 gr IV 1/2 hour before surgery and for 4 days after surgery.

Ciprofloxacin 500 mg: 2 tablets/day for 5 days after hospital discharge.

Ciprofloxacin 500 mg: 1 tablet the day before catheter removal and the post-operative RX.

Ciprofloxacin 500 mg: 1 tablet/day for 4 days after catheter removal.

Positive

Antibiotic according to the antibiogram

Patients with suprapubic tube

Combined antibiotics

Cephalosporin

Tobramycin

Surgeon and patient disinfection



Chlorexidine vs Betadine

Patient disinfection



Three times Chlorexidine cleaning

Operating room



SURGERY IN PROGRESS



**If you are not
working on
this case,
please
do not enter**

NO TRAFFIC

Operating room ?



Operating room



Operating room



Avoiding patient positioning related complications

Patient positioning



Exaggerated lithotomy position

Patient positioning



Old dangerous stirrups

Patient positioning



Nurse positioning



Surgeon positioning

Patient positioning



Simple lithotomy position



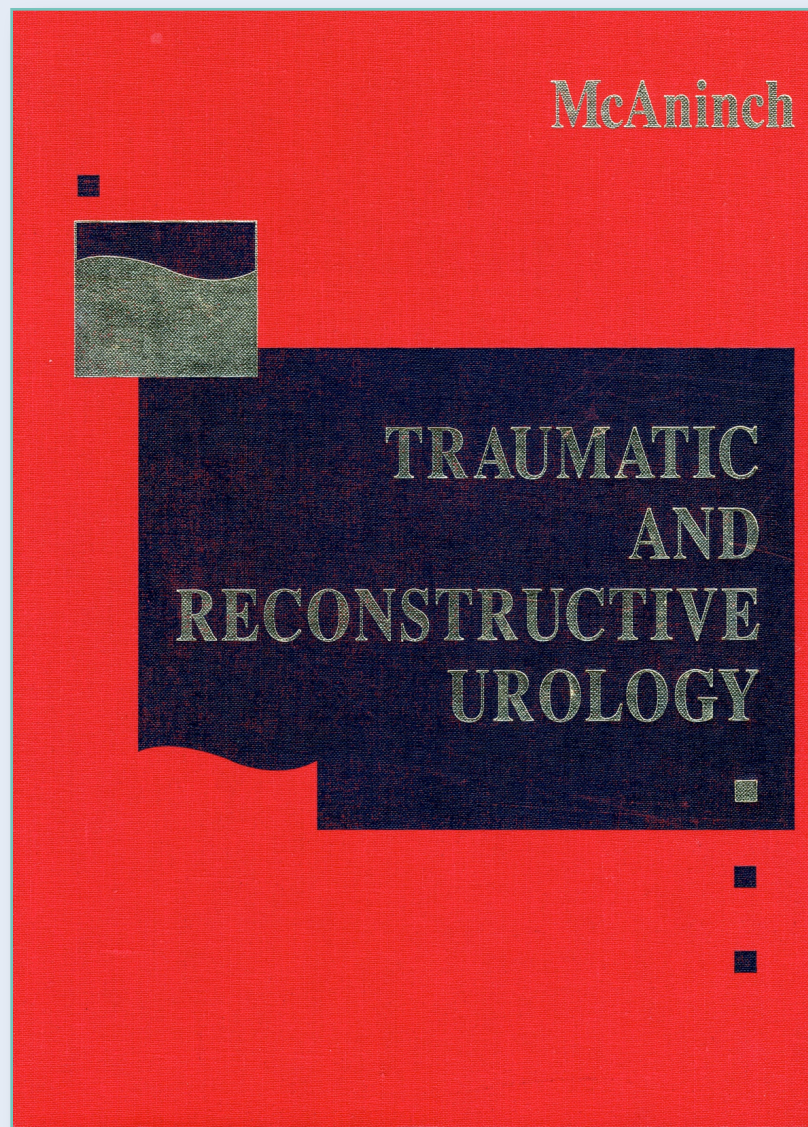
Mundy's "social" lithotomy position

Patient positioning



Inflatable sequential sleeves

Avoiding bleeding



1996

Mr. Richard Turner-Warwick

CHAPTER

48

**Substitution
Urethroplasty and the
Pedicled Island Penile
Skin Procedure**



**Observations on Hemostatic and
Hemorrhagic Anesthesiologic Procedures**

All operations on the anterior urethra naturally involve the spongy tissue so that a basic requirement of urethral surgery is the avoidance of erections or erectile tumescence; this is particularly important for operative procedures that require a definitive spongionasty. It is, therefore, somewhat remarkable that one of the commonest anesthetic procedures offered for urologic operations is an epidural block—the tumescence and partial erection that this commonly creates may reassure the anesthesiologist that the anesthesia is progressing satisfactorily—but is not helpful to the urologist.

Urologists commonly complain about unwanted erections, but many anesthesiologists have never been asked to prevent them—and some do not know how to prevent them effectively. It is important to appreciate that a positively diminished erectile tissue blood supply and an induced systemic hypotension are quite different hemodynamic features that may or may not be coincident during anesthesia. In general, a pharmacologic ganglion blockade sufficient to cause dilatation of the pupils induces a specific reduction in the vascular circulation of the erectile tissue and enables one to “look into the interstices” of the spongy tissue after sponging (instead of a constant welling up) before it significantly reduces the systolic blood pressure. A secret of a comfortable surgical operating field is induced bradycardia.²¹

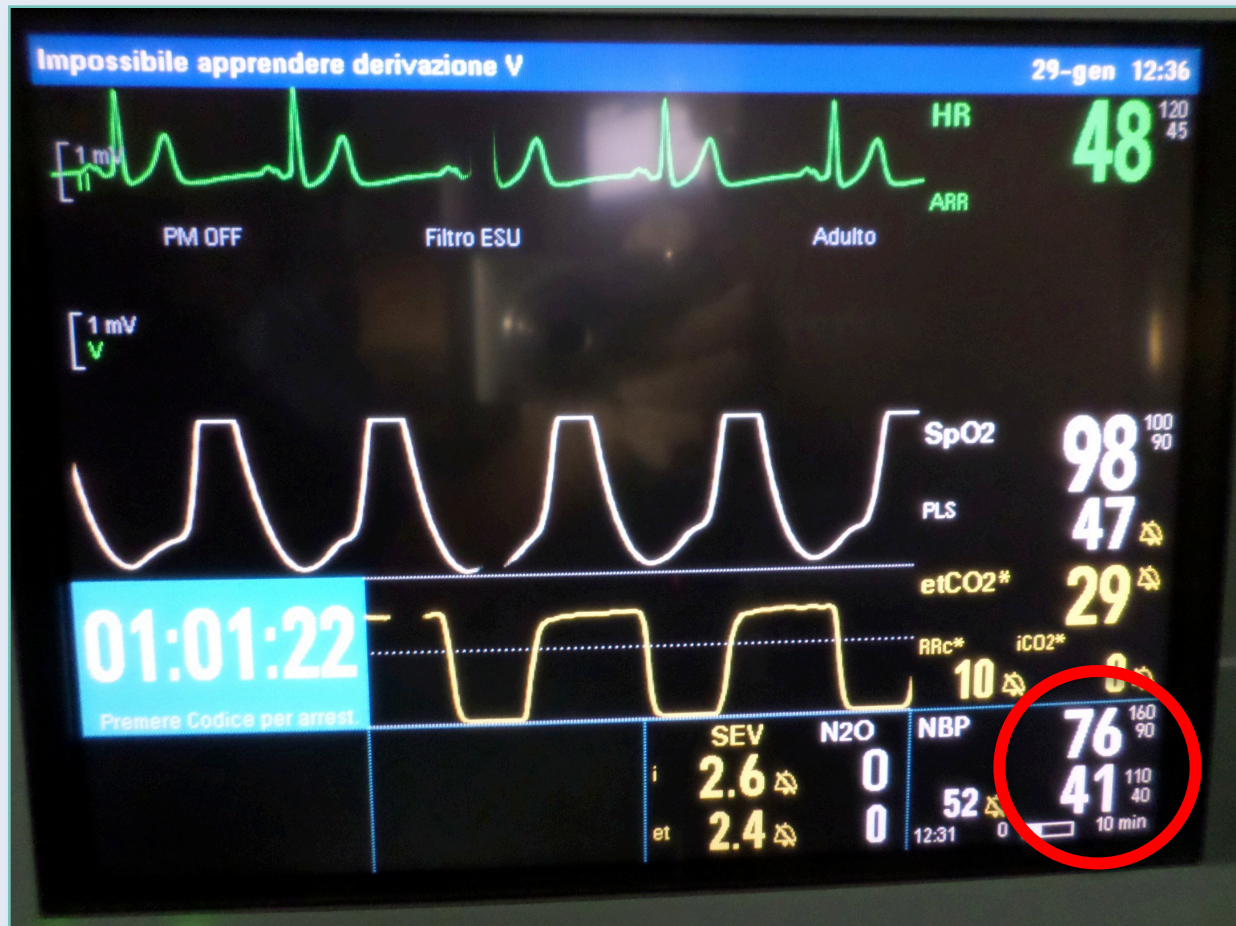
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“...epidural block is not helpful for the urologist...”



...but it is helpful for the anesthetist ”.



Induced controlled systemic hypotension

Avoiding surgical mistakes

Patient reassessment



Before the surgery, reassess again the patient clinical history and Rx!

Patient reassessment

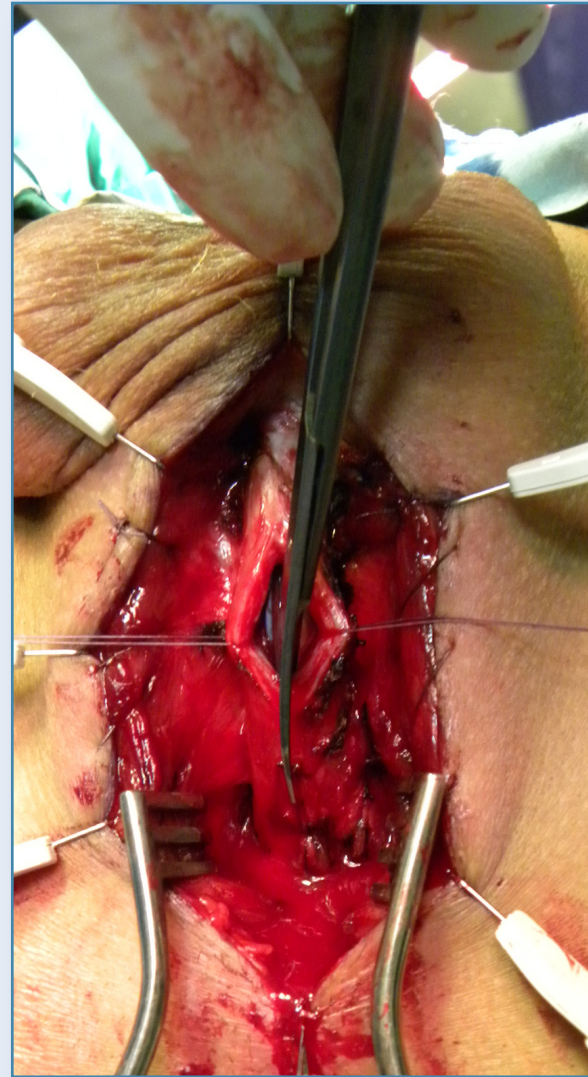
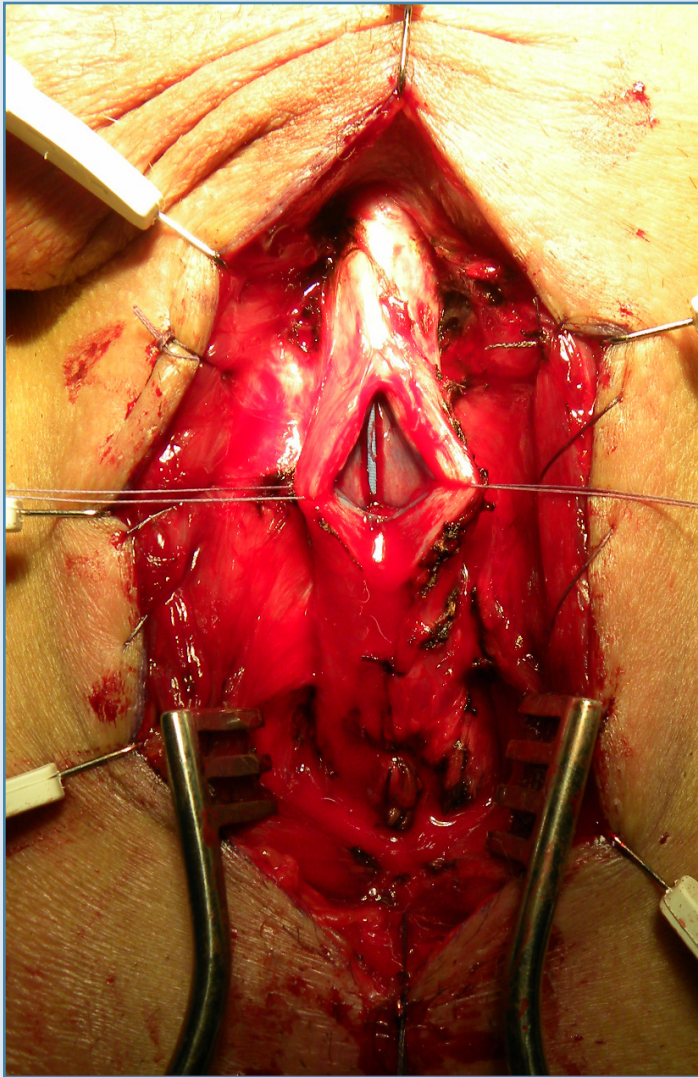


Discuss with the anesthesiologist and the scrub nurse what you need and what you are planning !

Pre-operative urethroscopy



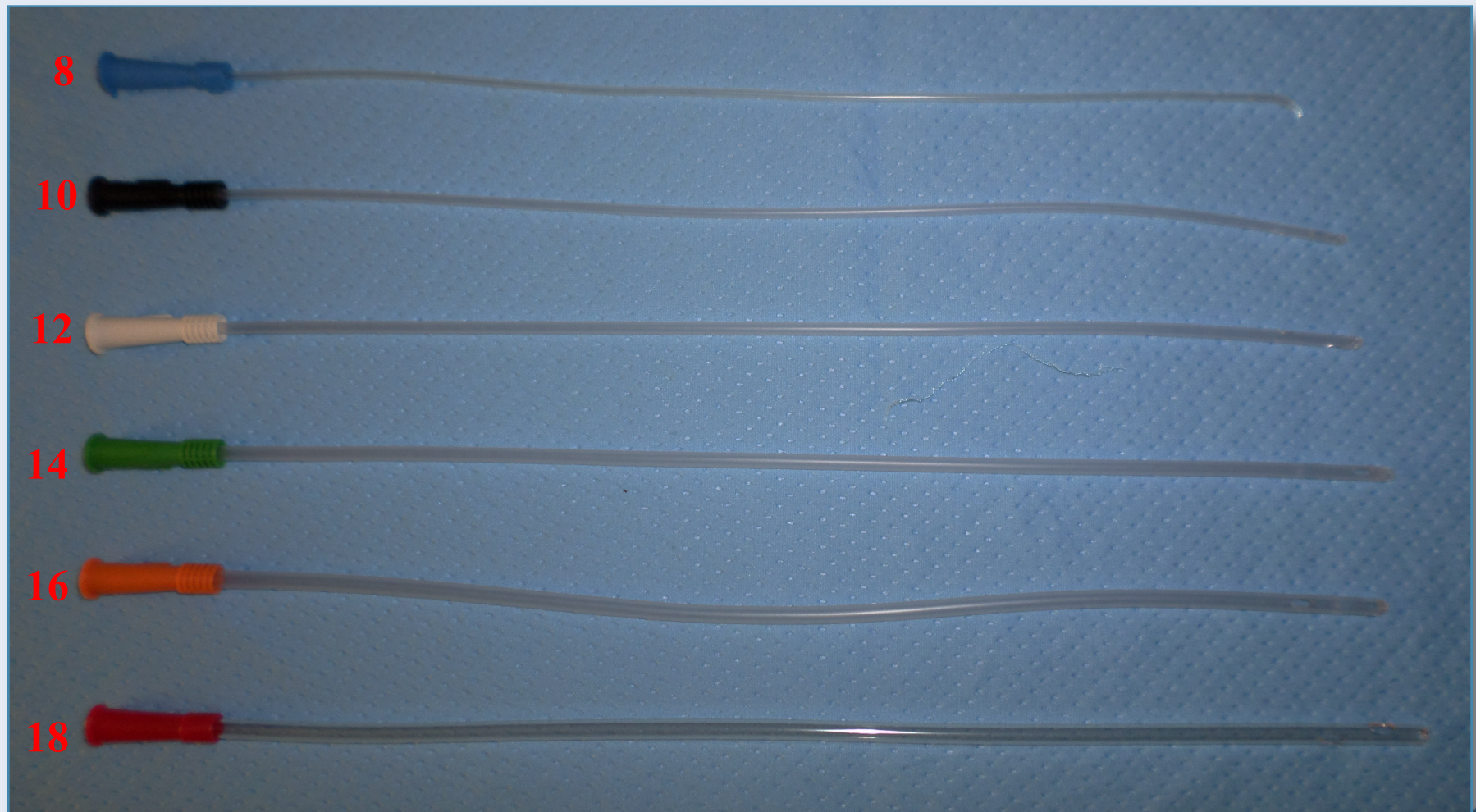
Pre-operative urethroscopy



Get it over with the use of these “diabolic” instruments



Use only these atraumatic instruments






Any problem during urethroplasty should be clarified

ONLY under direct vision !

Some lessons that have greatly improved my surgery !



- 1. Oral mucosa harvesting**
- 2. Two-stage penile urethroplasty**
- 3. One-stage bulbar urethroplasty**
- 4. Perineal urethrostomy**

Oral mucosa harvesting

Double team



Two-stage penile urethroplasty

When use the oral mucosa at the first stage ?

Failed hypospadias



No

Lichen sclerosus



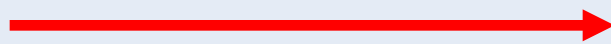
Yes

Two-stage penile urethroplasty

When use the oral mucosa at the first stage ?

(Eur Urol 2006; 49: 887-895)

Failed hypospadias



39% of patients

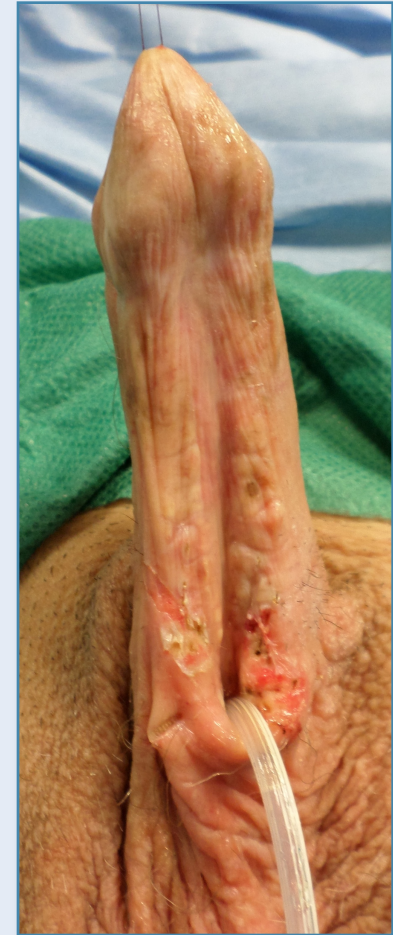


**How to do two-stage penile
urethroplasty using oral mucosa
only at the second stage**

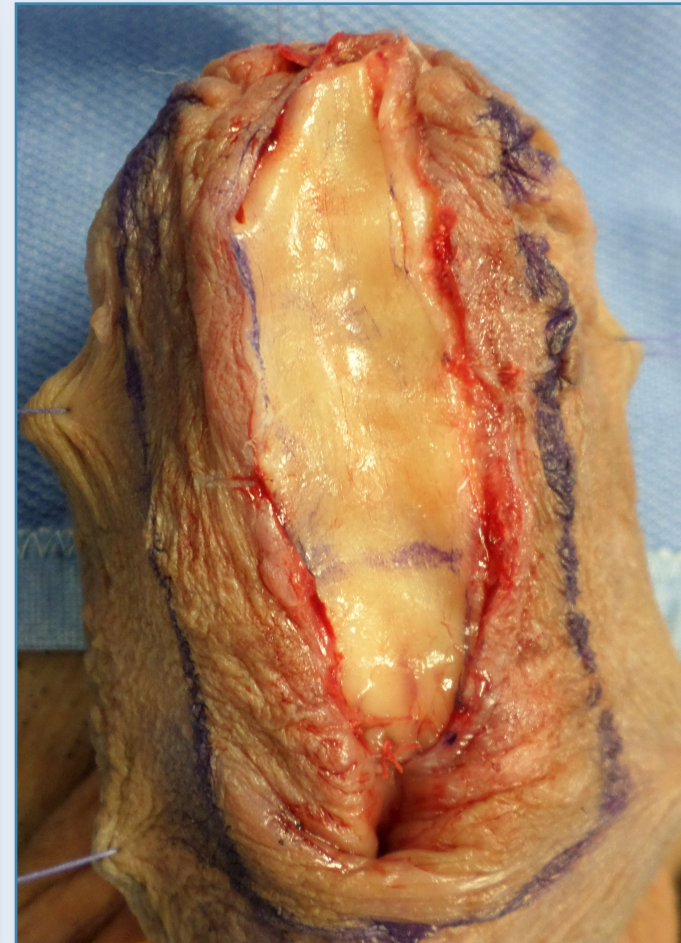
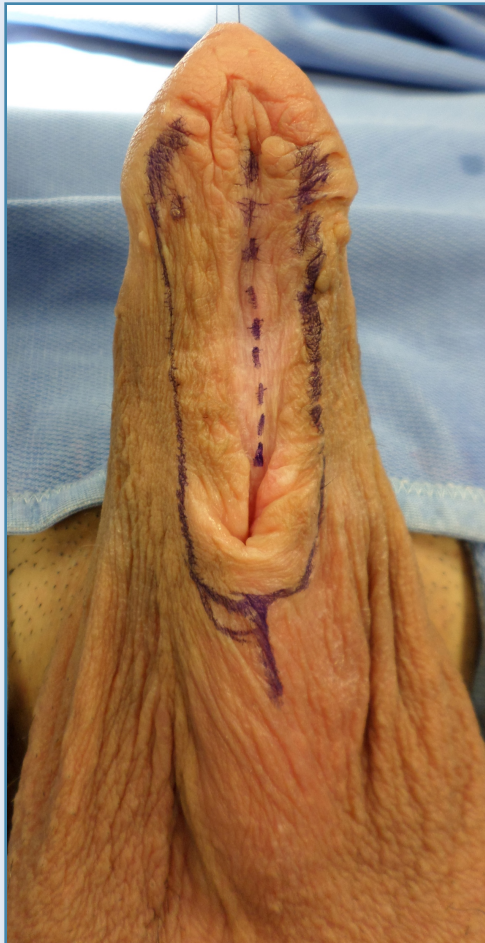
First stage – Johanson's urethroplasty



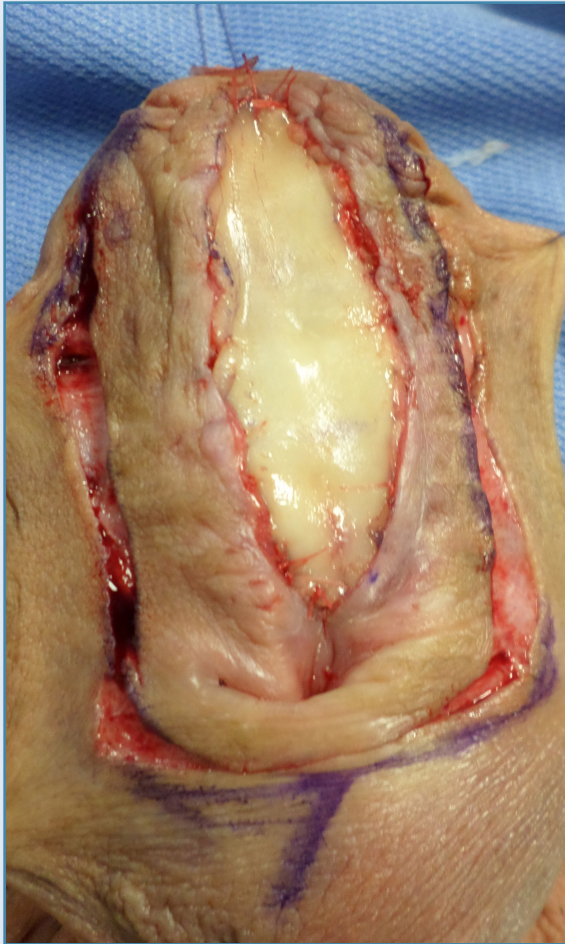
First stage – Johanson's urethroplasty



Second stage: Oral graft inlay urethroplasty

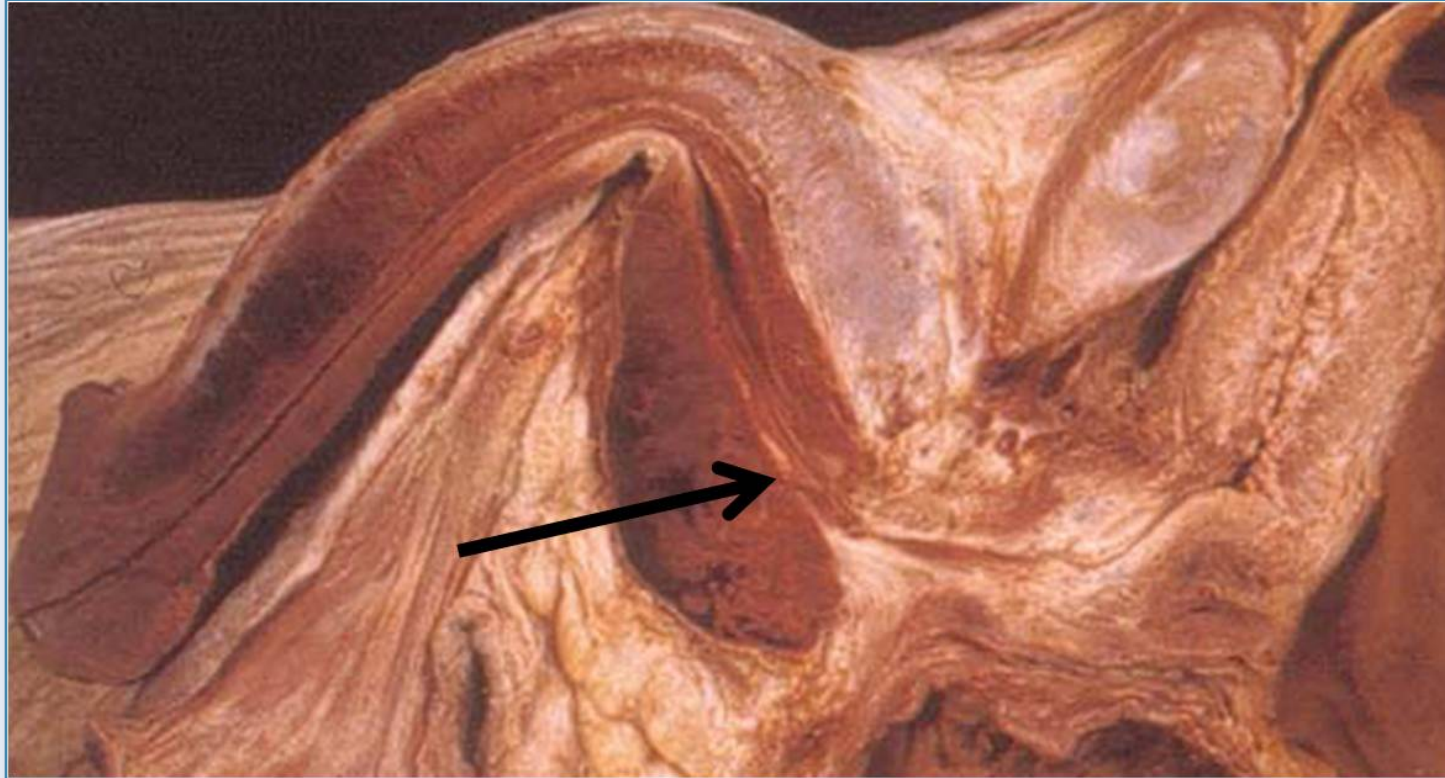


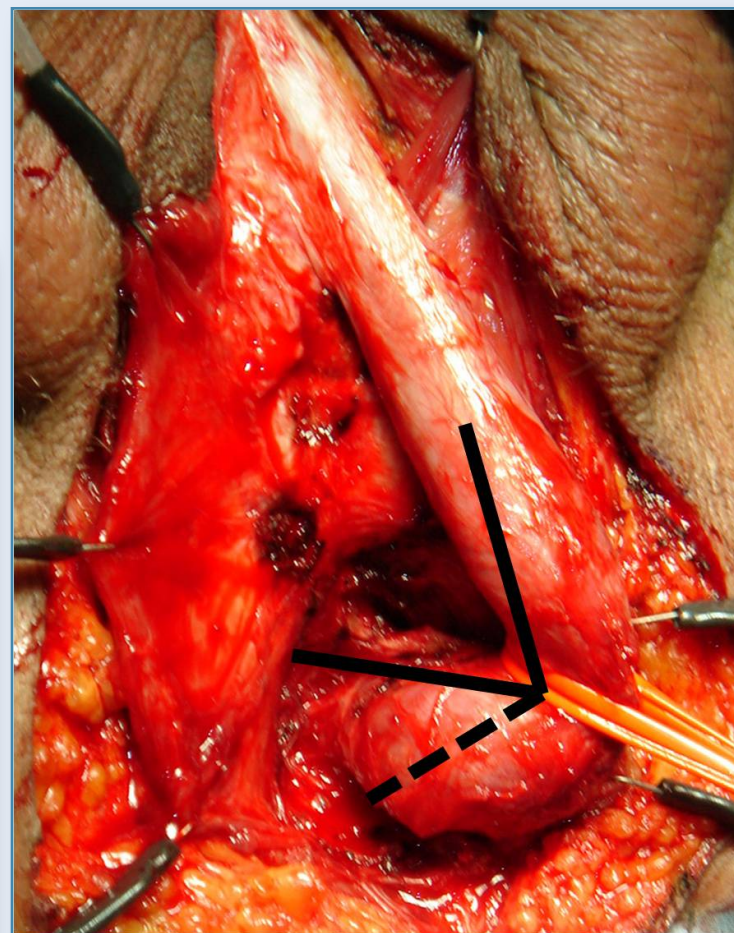
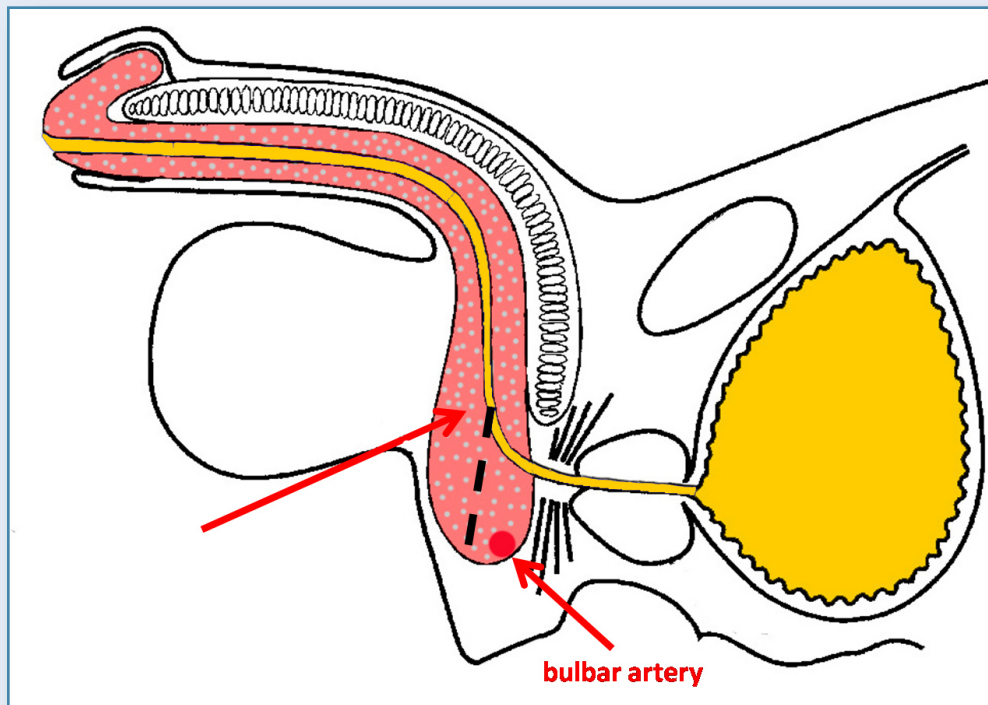
Second stage: Oral graft inlay urethroplasty

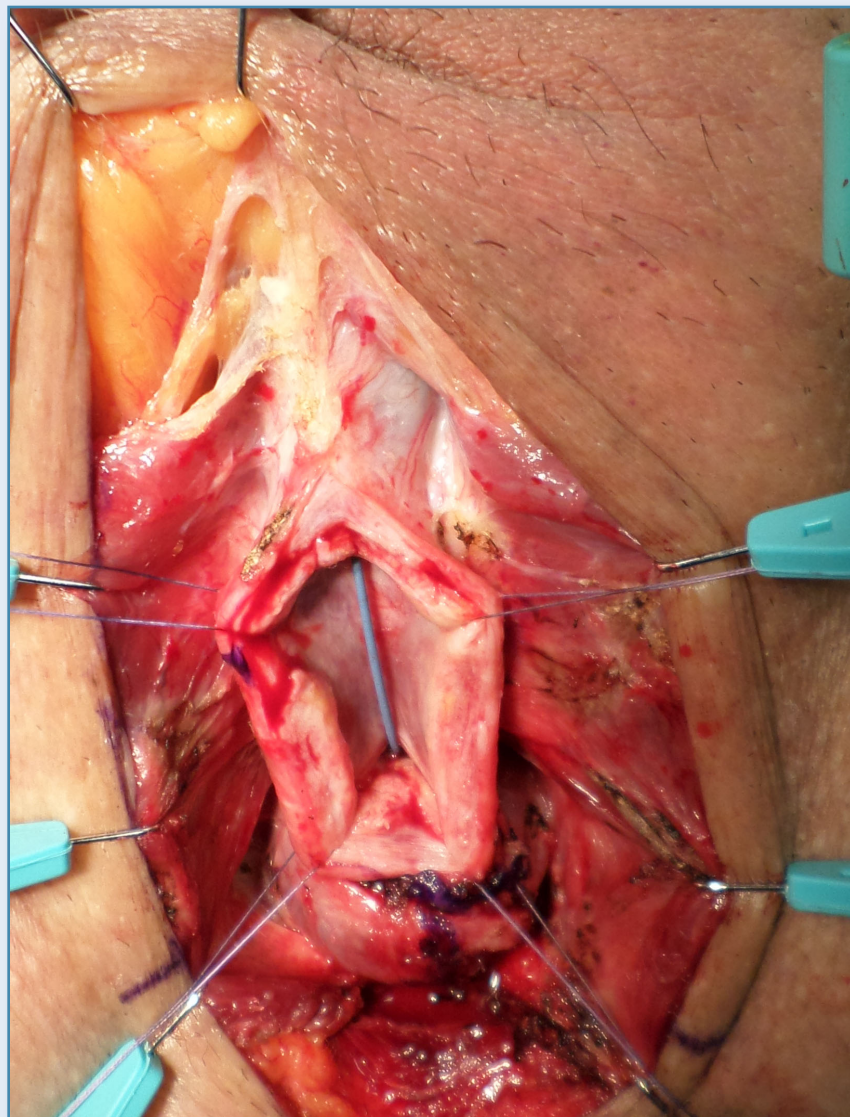
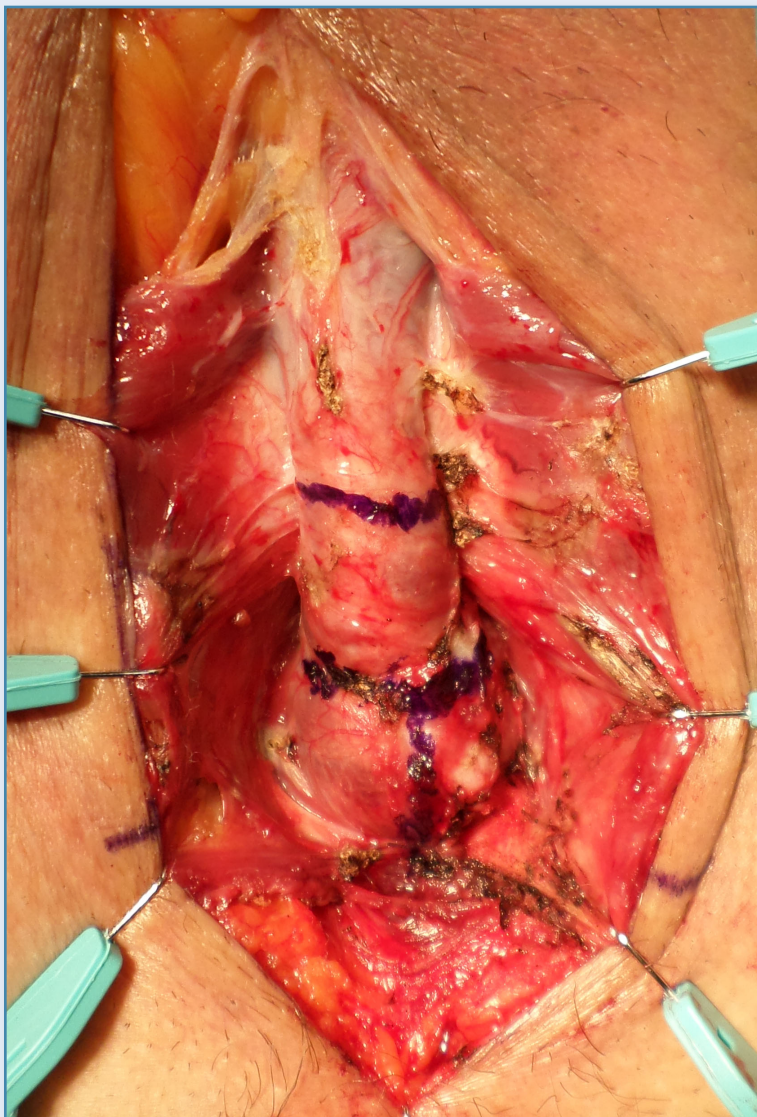


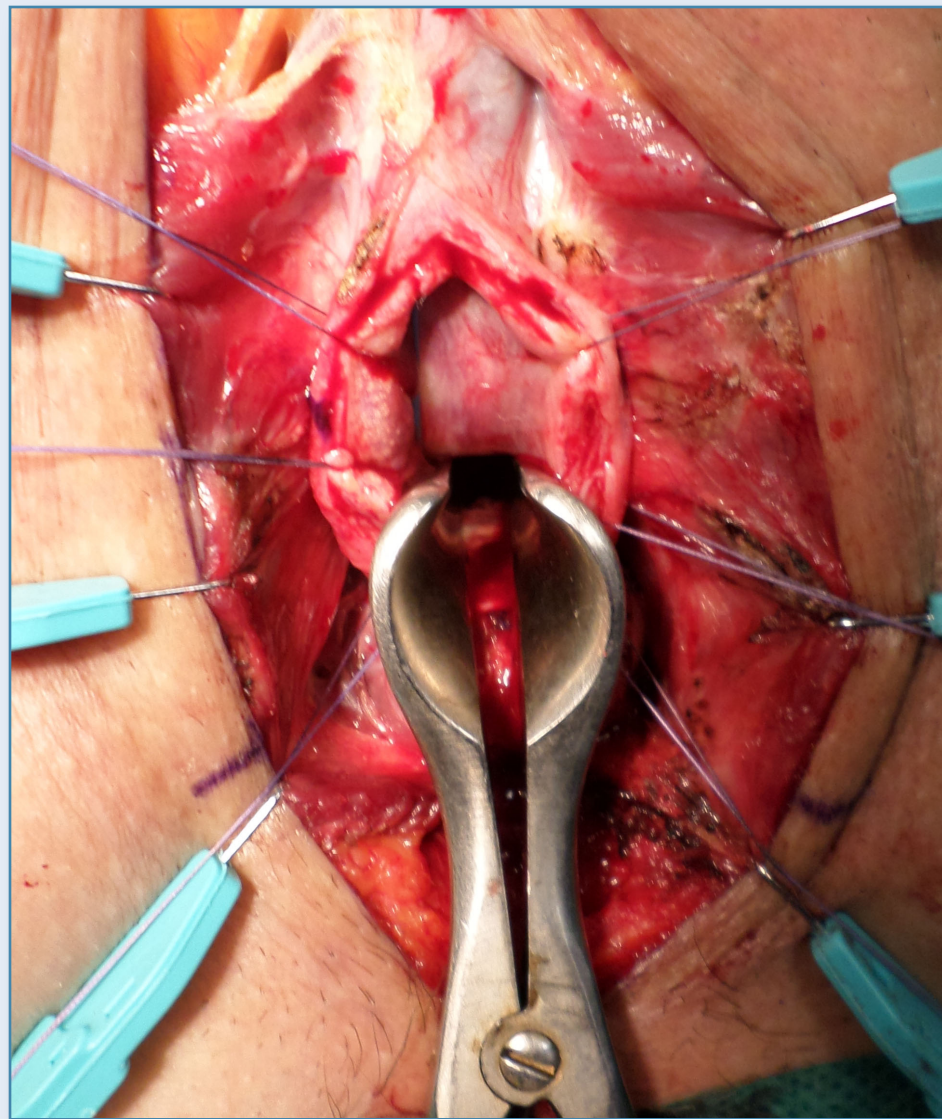
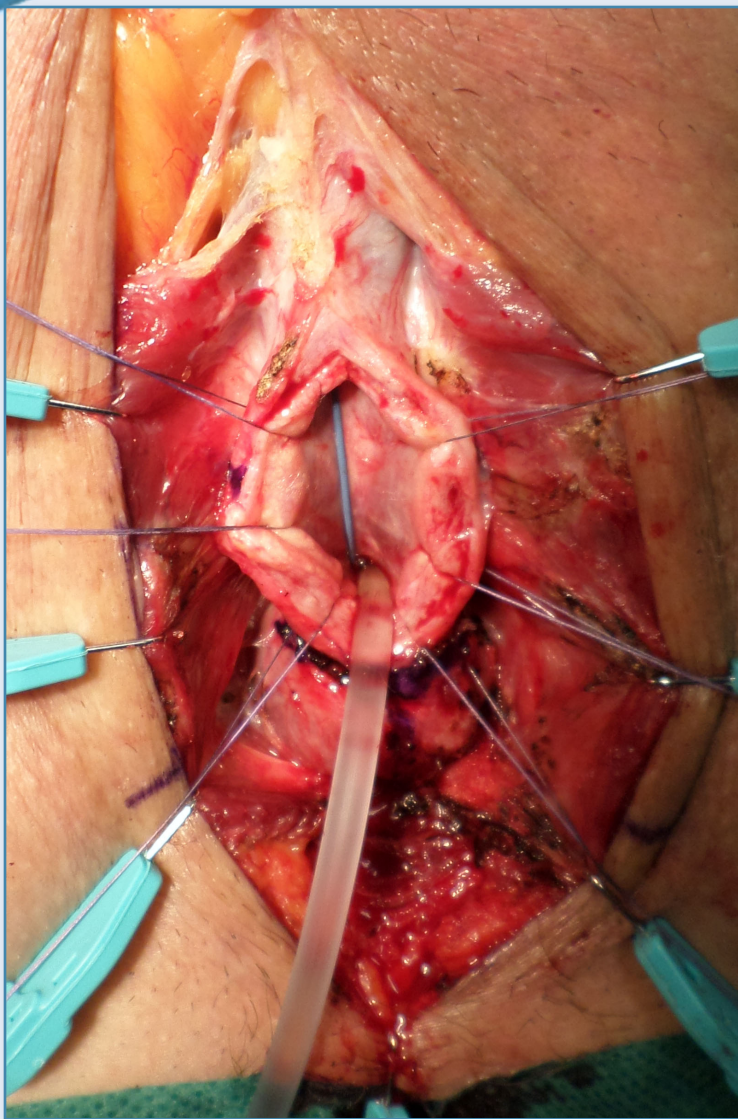
One-stage bulbar urethroplasty

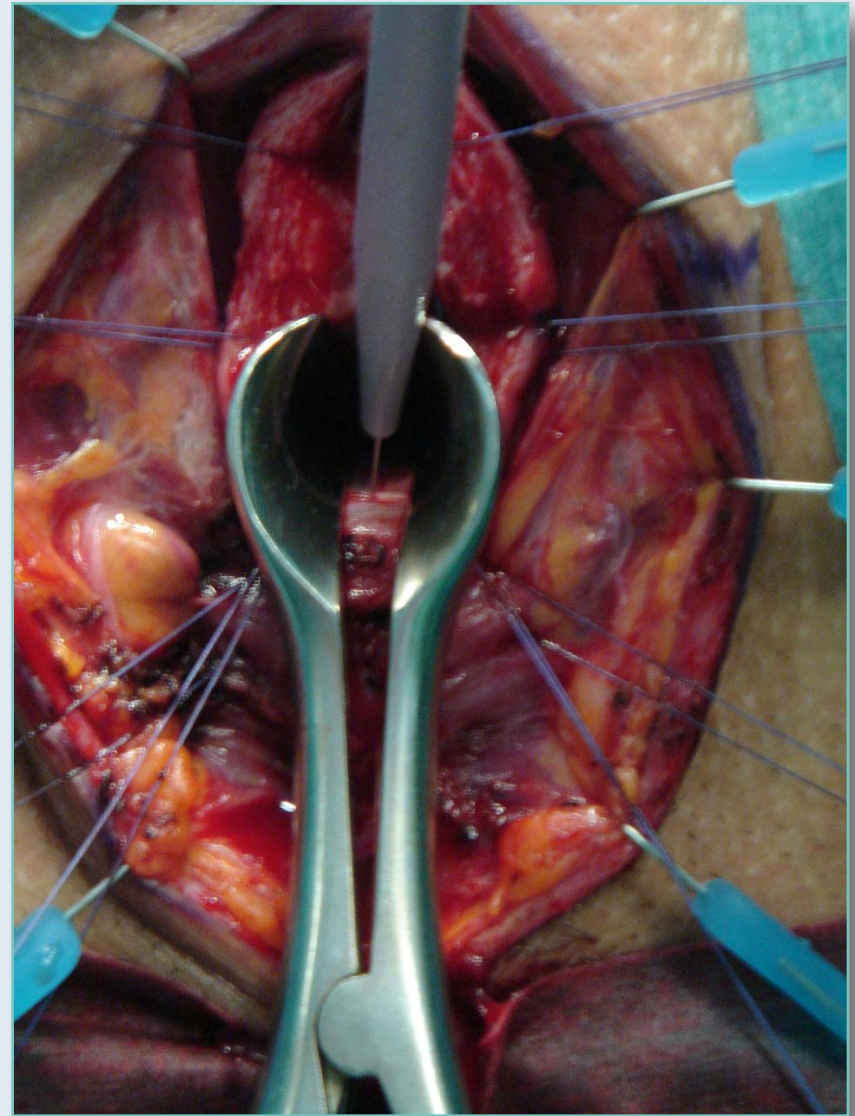
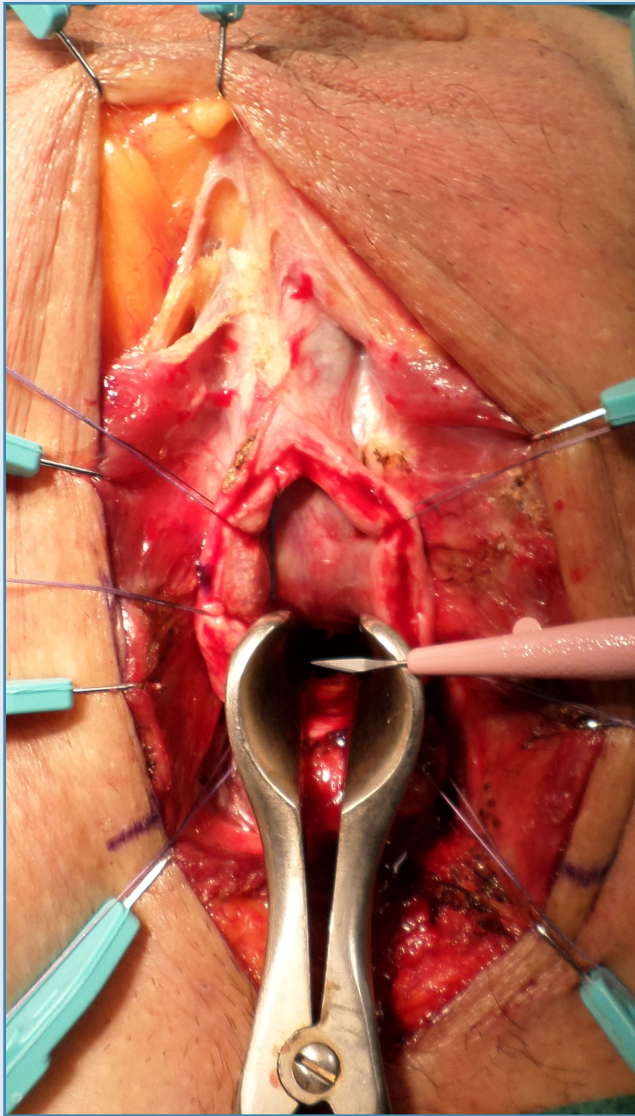
The true anatomy of bulbar urethra

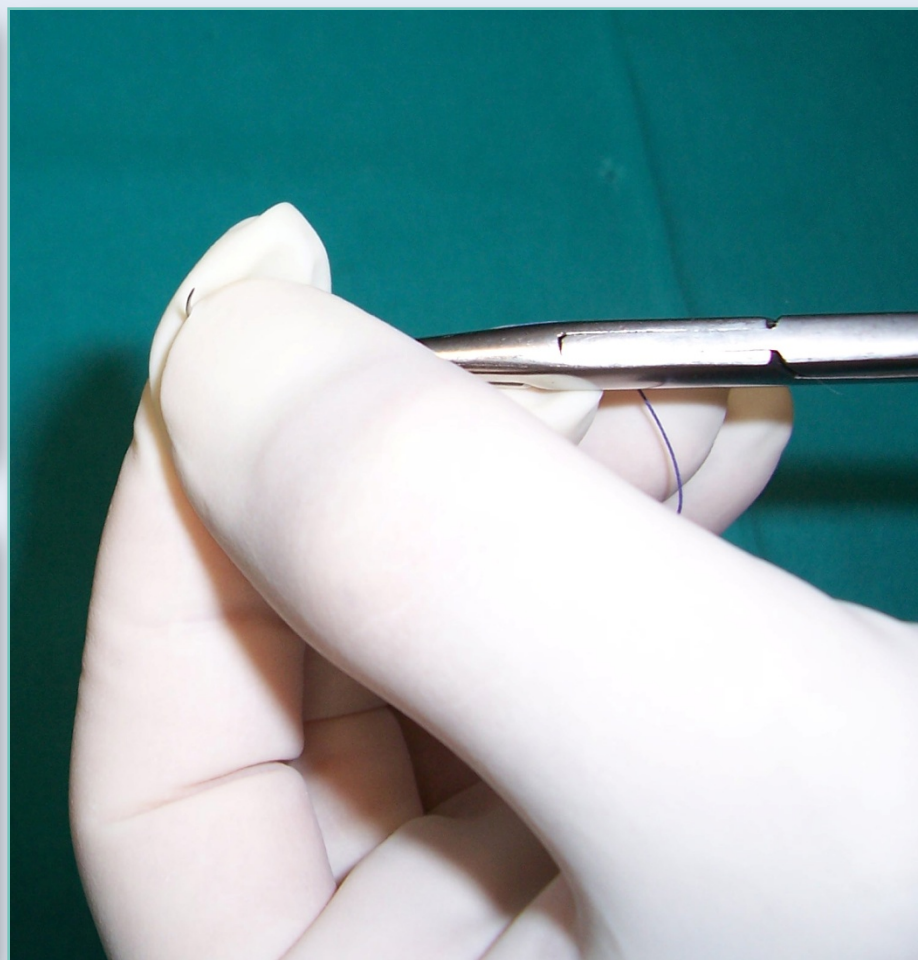
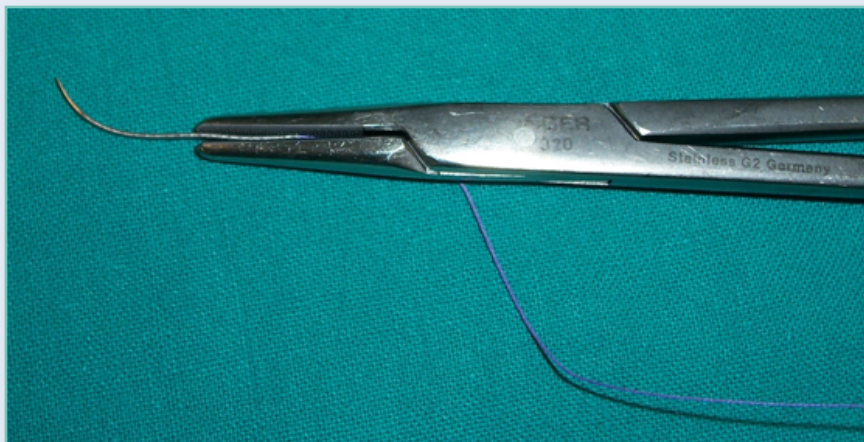


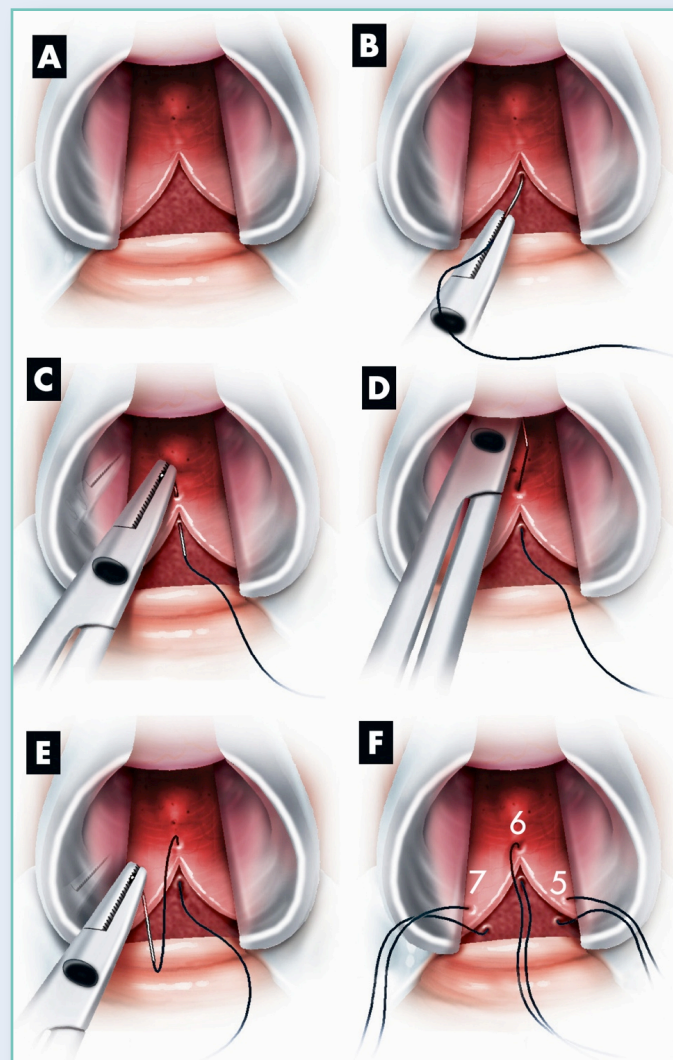
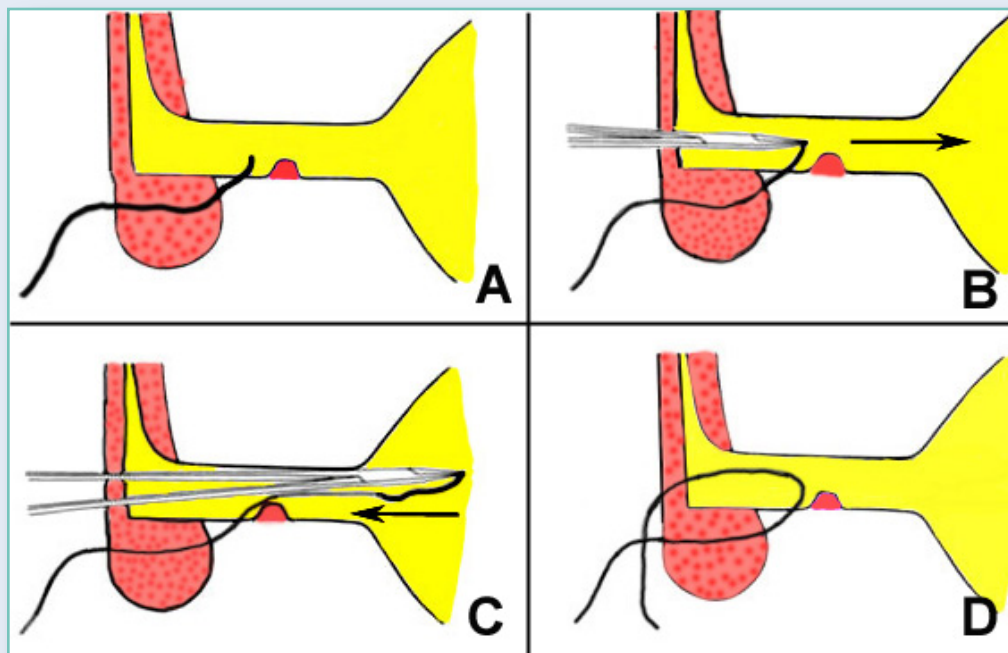


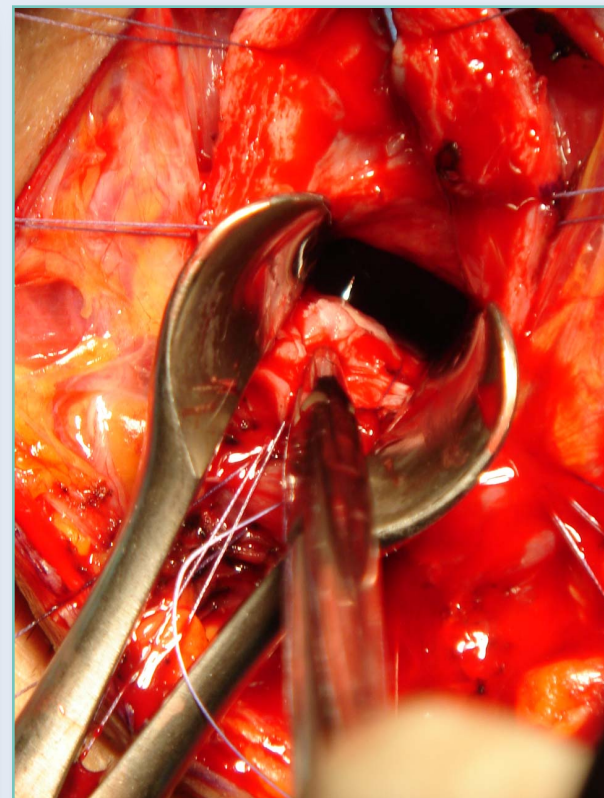
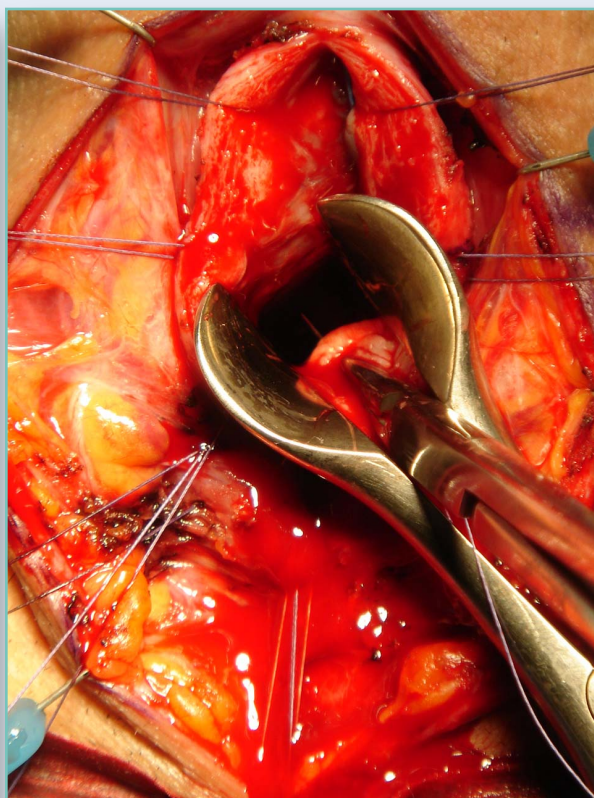
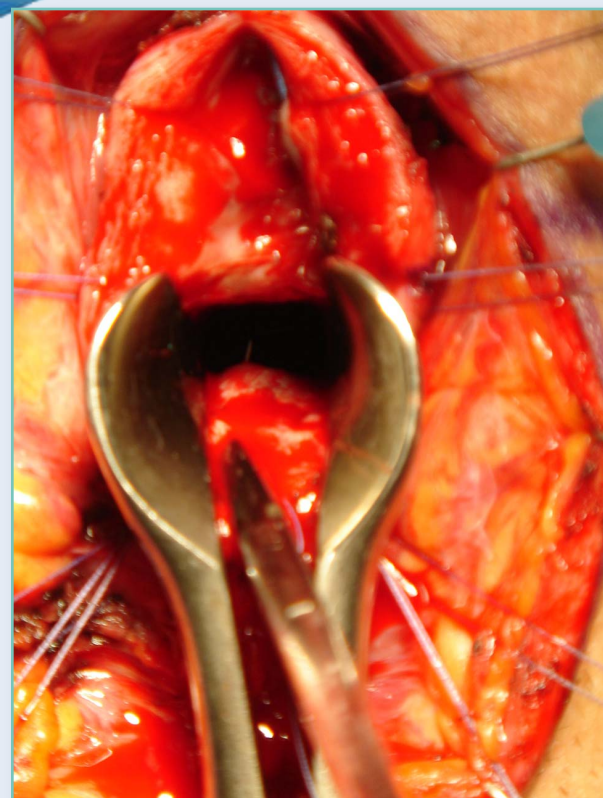


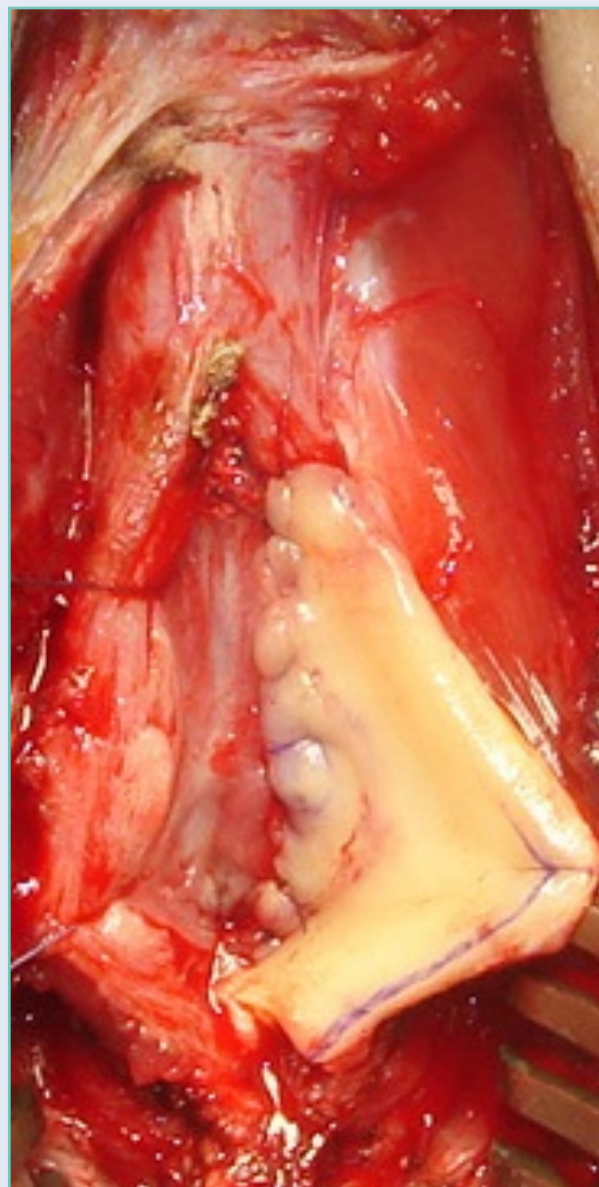
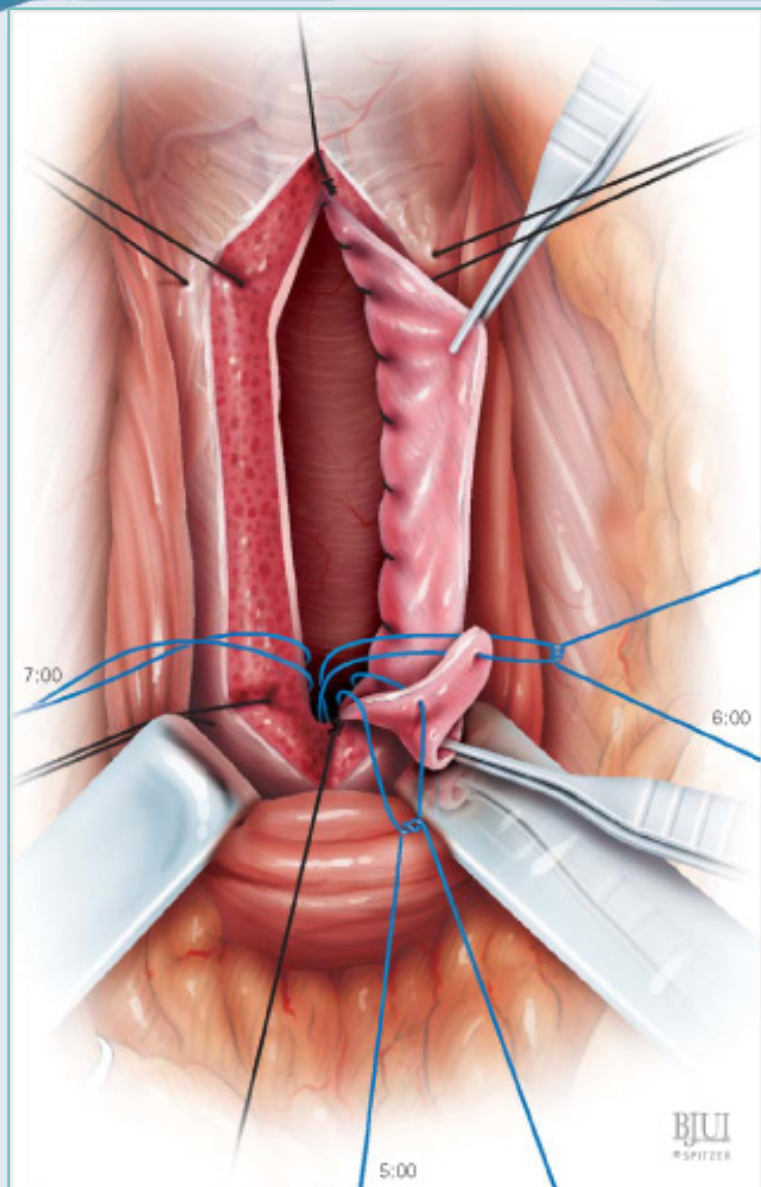


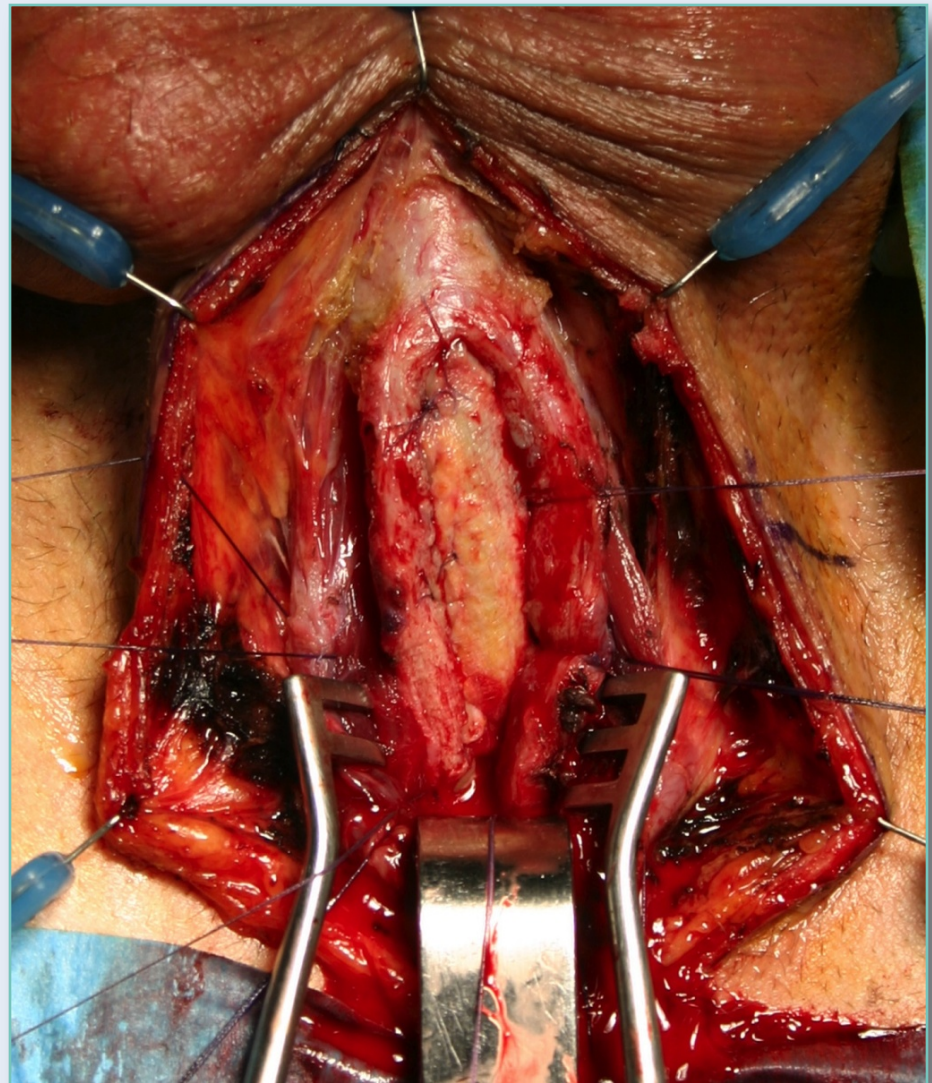
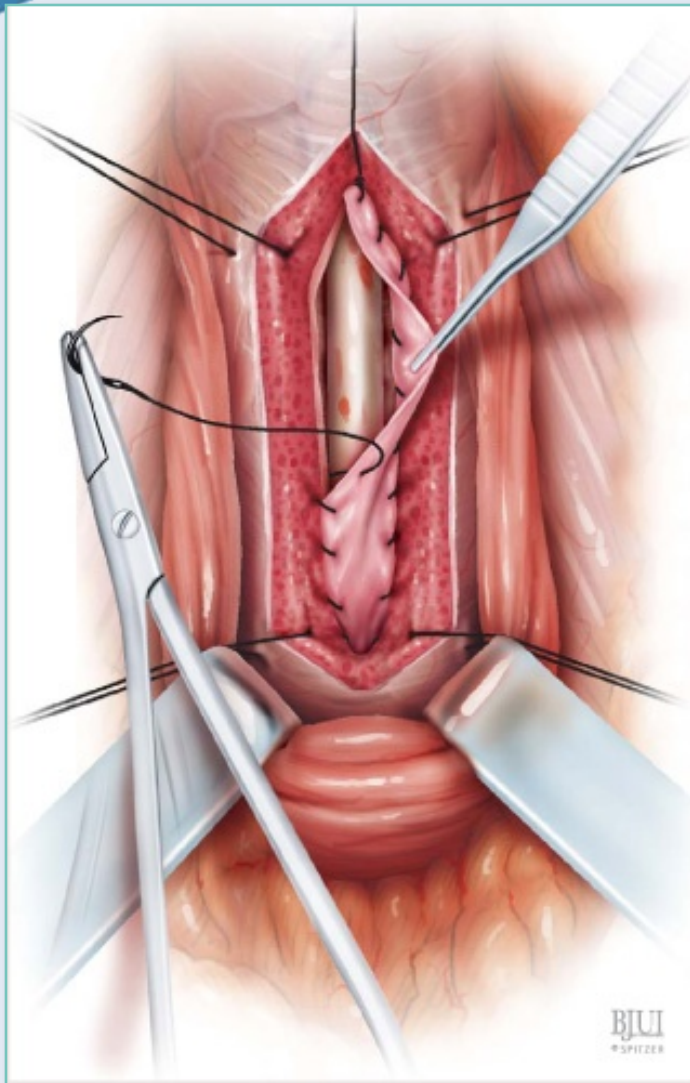


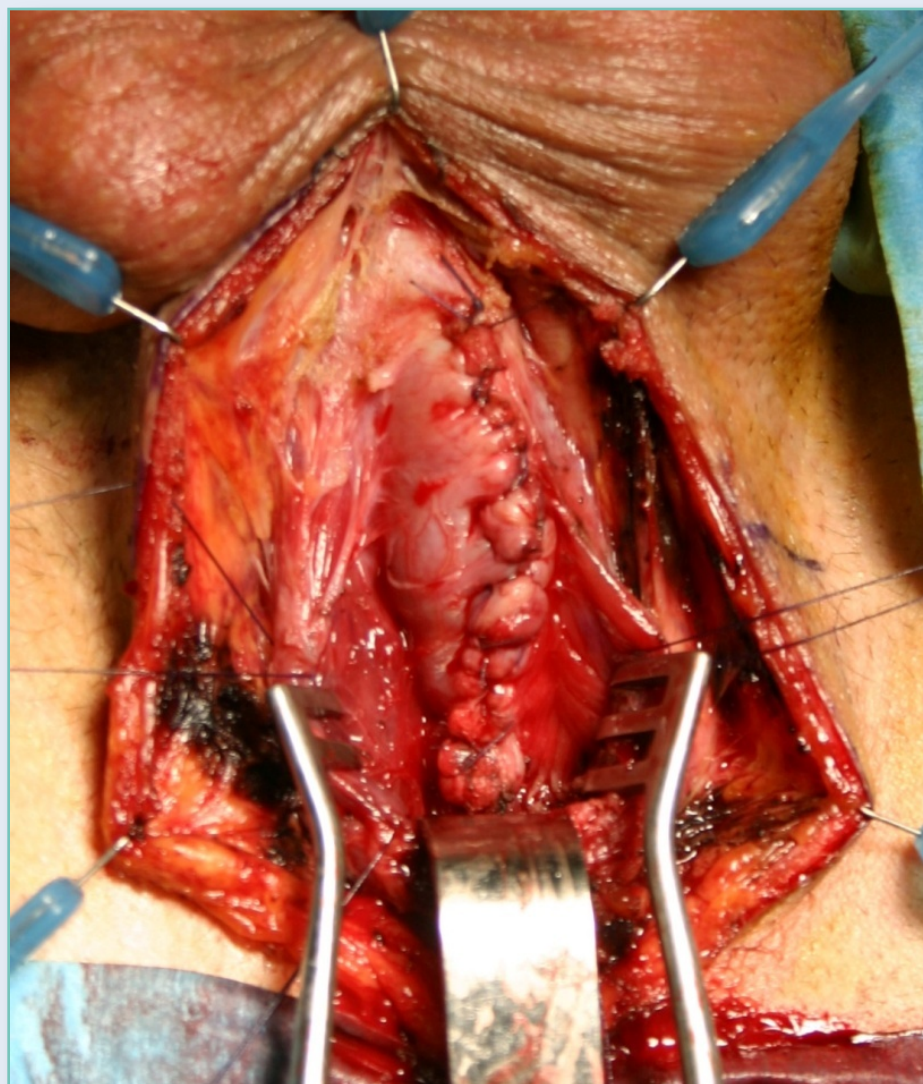
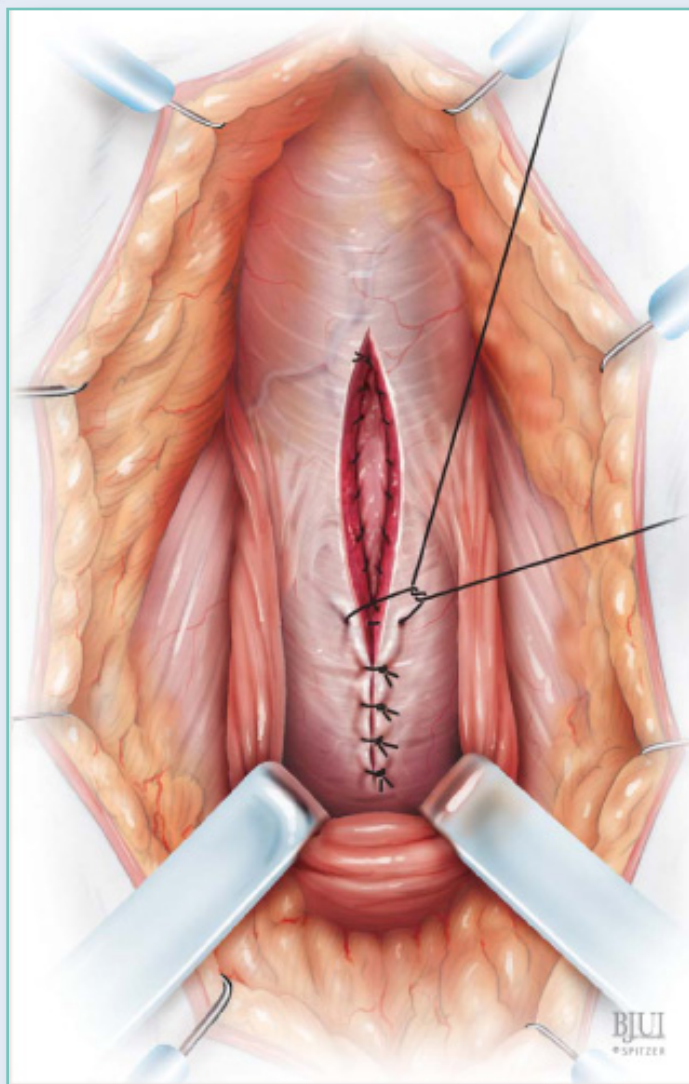












Panurethral stricture disease

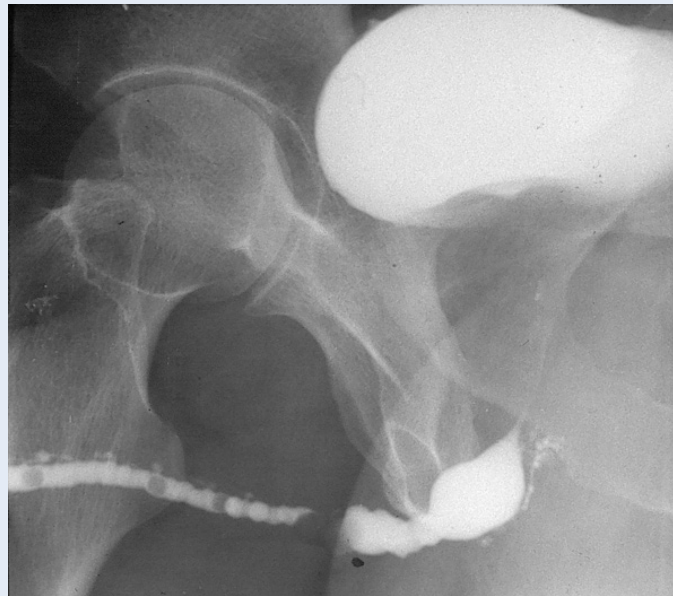
I want you to remember, that at the end of the urethra there is the bladder and, in some patients, **longstanding, chronic panurethral stricture disease** may greatly influence the bladder morphology and function!



Perineal urethrostomy or pan-urethroplasty ?

Panurethral stricture disease

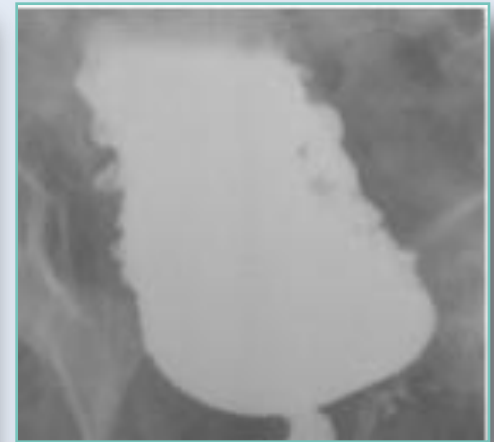
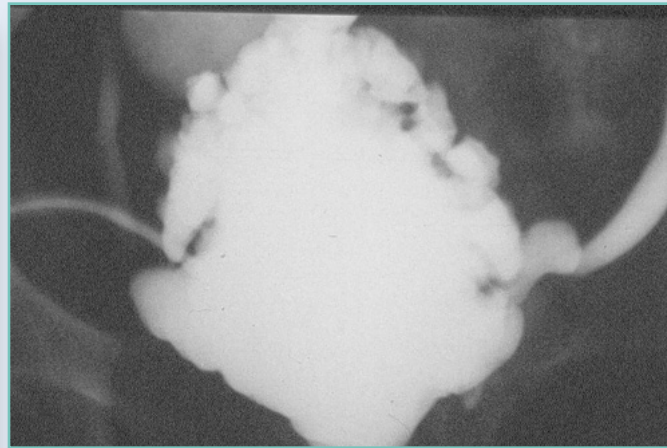
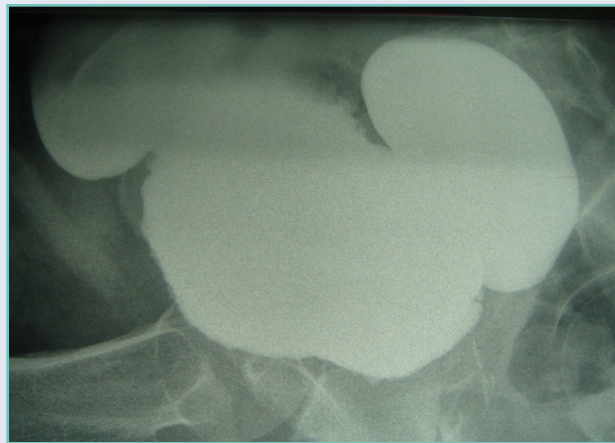
Patient with panurethral stricture disease associated with normal bladder.



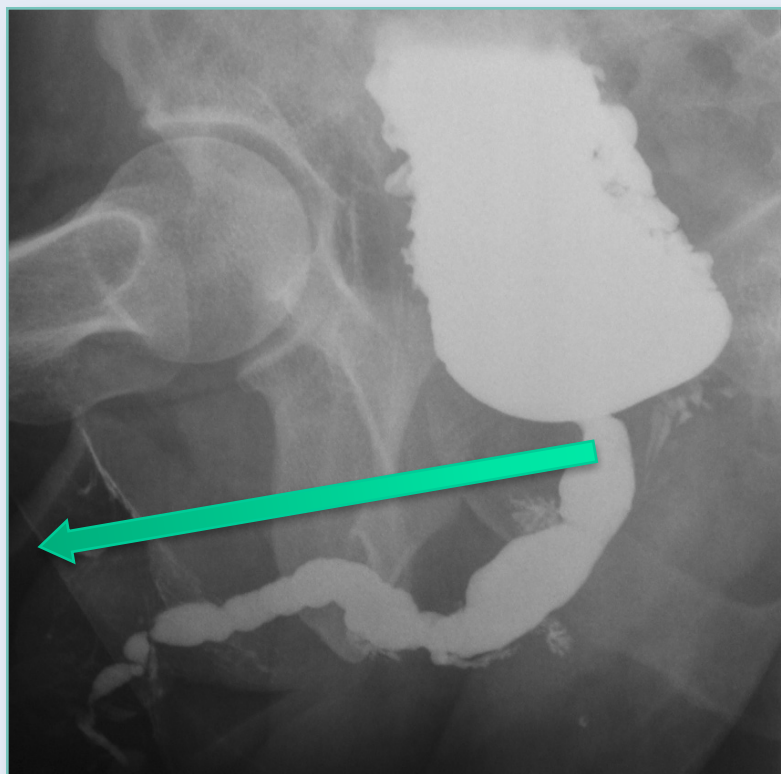
Pan-urethroplasty

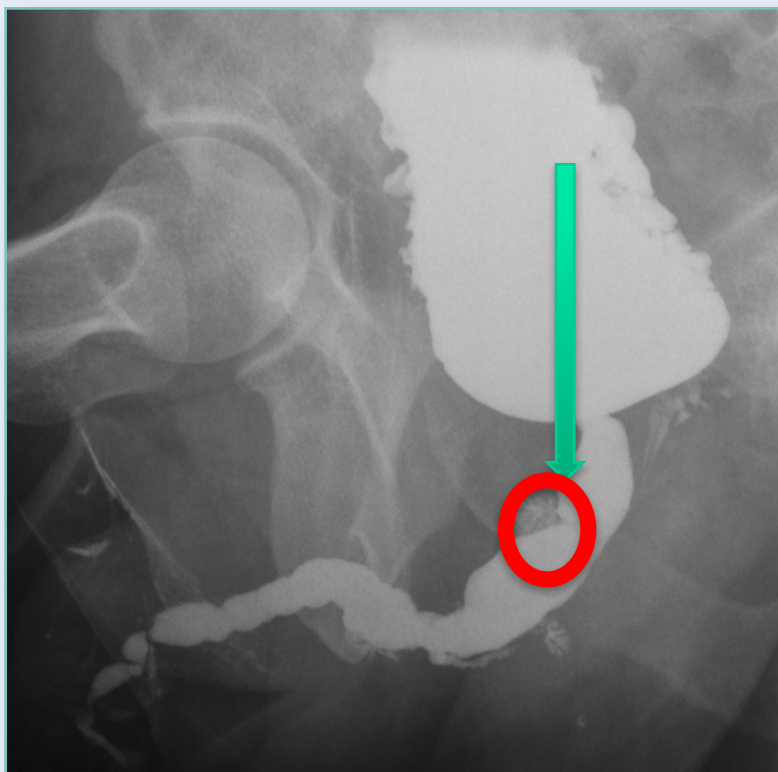
Panurethral stricture disease

Patient with panurethral stricture disease associated with abnormal bladder.

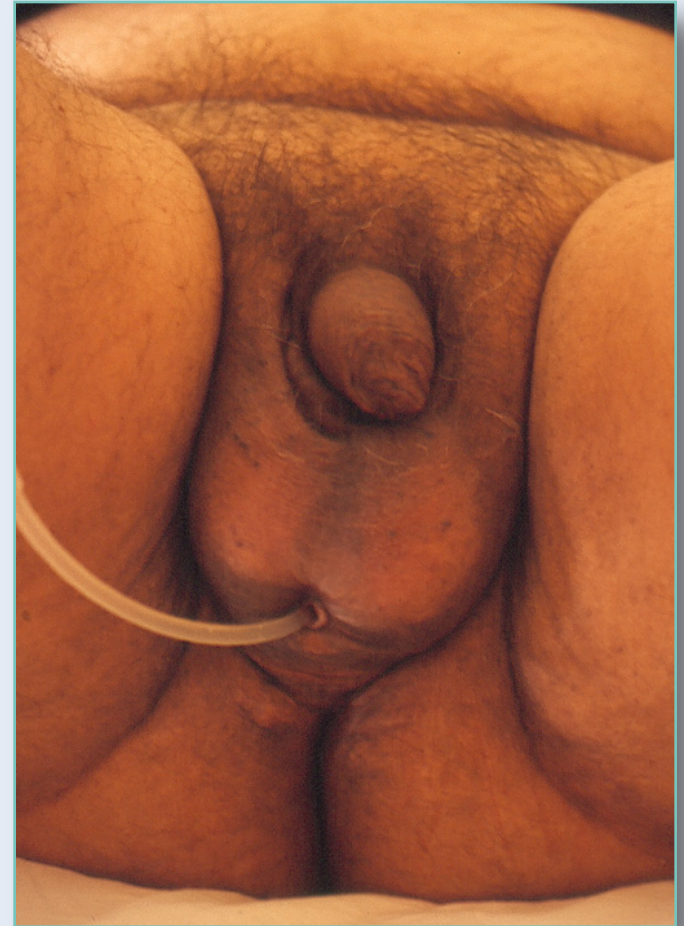


Perineal urethrostomy





Perineostomy is not a hole into perineum !



Perineostomy is to convert the long male urethra into the short female urethra !



Perineostomy: When?

Age

General condition and associated diseases

Psychologically stable patient

Superficial recurrent bladder tumor

Bladder diverticula

High capacity bladder

Decompensated bladder

Previous multiple failed urethroplasties

Perineostomy vs Urethroplasty

Benefit

```
graph TD; A[Benefit] --> B[45 min. surgery vs 3 h. surgery]; B --> C[Easy repair of recurrent stricture]; C --> D[Easy endoscopic bladder investigation]; D --> E[Easier bladder emptying];
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45 min. surgery vs 3 h. surgery

Easy repair of recurrent stricture

Easy endoscopic bladder investigation

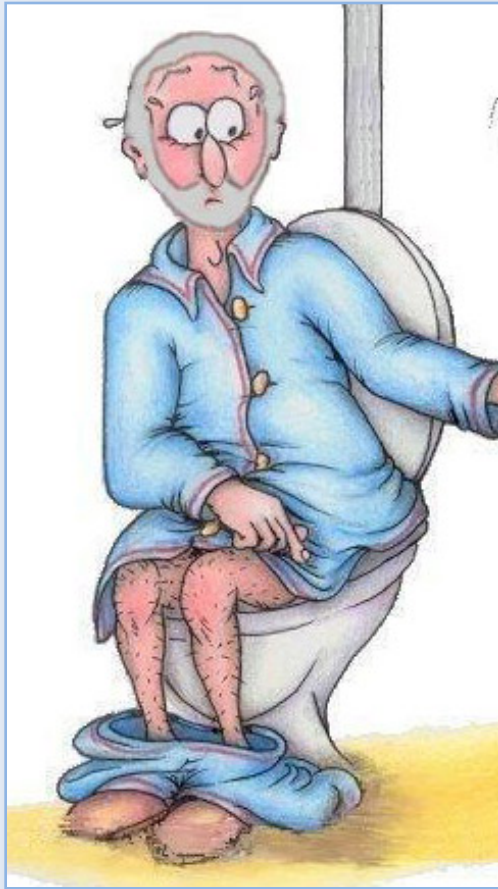
Easier bladder emptying

To be, or not to be: that is the question!



William Shakespeare - England

To urinate seated or standing: that is the question!



Guido Barbagli - Italy

**Thank you for your
attention.
I greatly appreciate it!**

