

Posterior Urethroplasty Step By Step

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Reconstructive Urology

Shahid Beheshti Medical University

SBMU

TAJRISH HOSPITAL

FOUNDED IN 1958

RUD, TAJRISH
24 years experience

Posterior Urethroplasty

Step By Step

- If patient doesn't have any orthopedic injuries of the lower extremities
- we proceed reconstruction within 4 to 6 months after trauma

Posterior Urethroplasty

Step By Step

Preoperative evaluation includes:

- Clinical history as well as stricture etiology
- Physical examination
- Urine culture
- Simultaneous cystogram and retrograde urethrogram
- Flexible cystoscopy through the suprapubic tract in combination with rigid urethroscopy through the meatus (up and down oscopy) to carefully evaluate site and length stricture or distraction and posterior urethral deviation
- AP pelvic x-ray

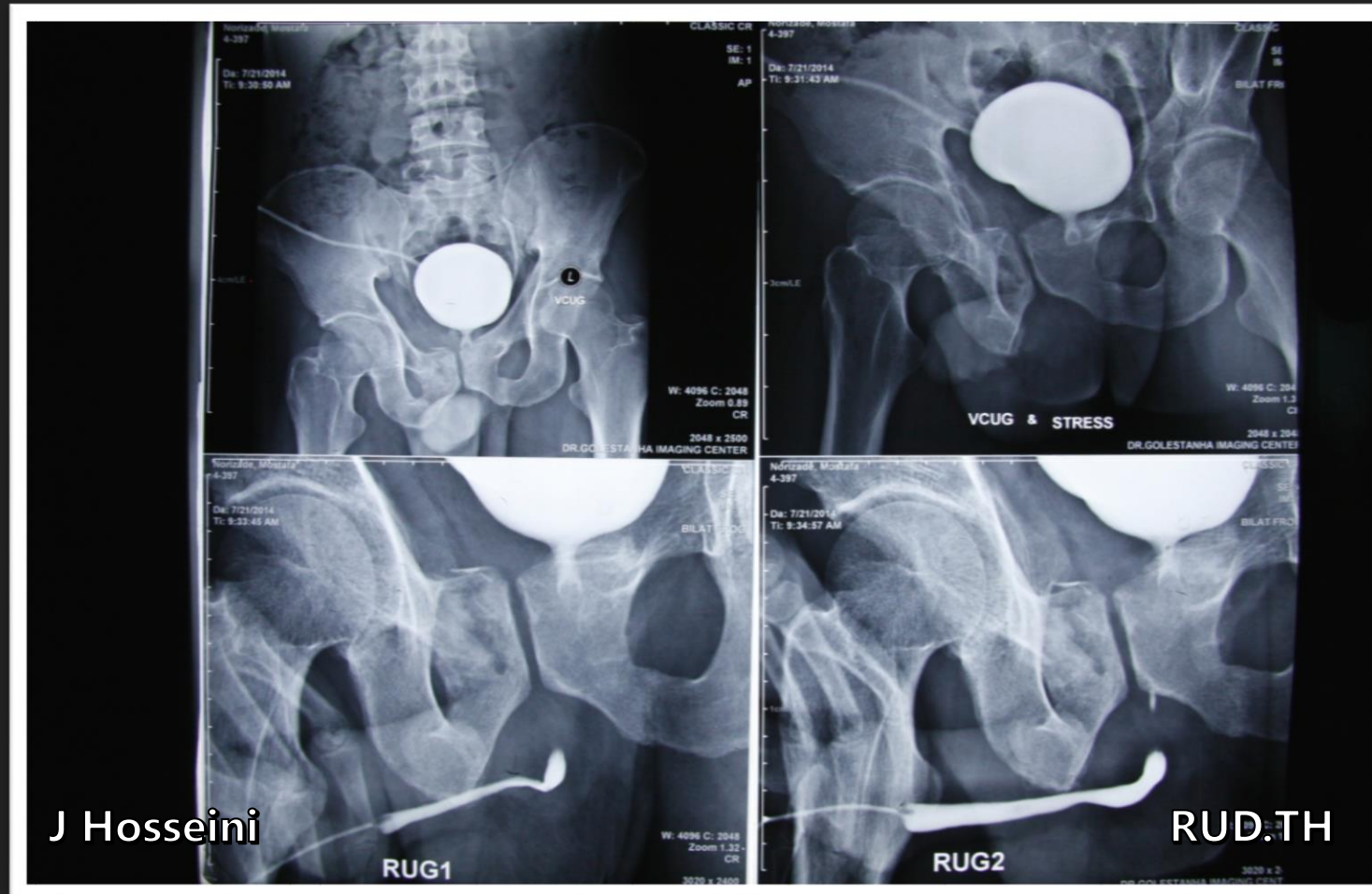
Posterior Urethroplasty

Step By Step

Preoperative evaluation includes:

- simultaneous cystogram and retrograde urethrogram
- Flexible cystoscopy through the suprapubic tract
- in combination with rigid Urethroscopy (up and down scopy) to carefully evaluate site and length stricture or distraction and posterior urethral deviation

simultaneous cystogram and retrograde urethrogram



Posterior Urethroplasty

Step By Step

The Day on Surgery :

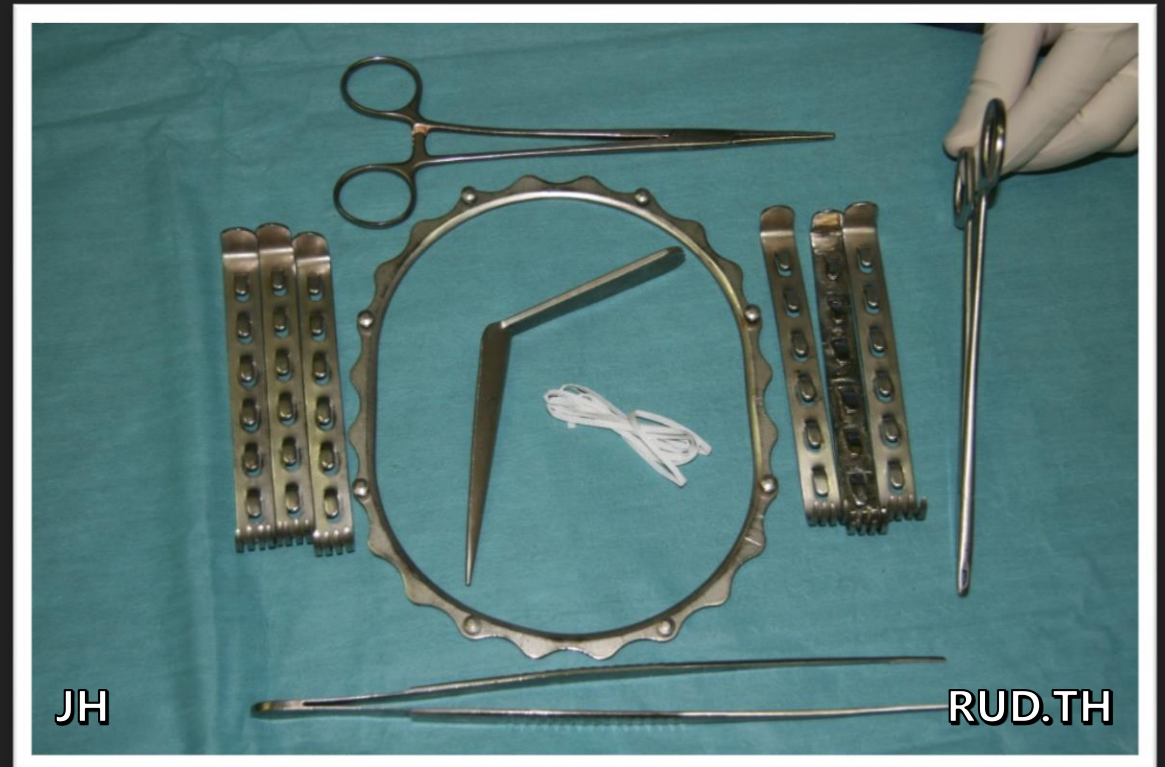
- Prophylactic antibiotics are administered.
- We prefer the use of the simple lithotomy position.

Posterior Urethroplasty

Step By Step

Recommended instruments :

- Turner warwick retractor
- Gorget
- Monopolar electro-cautery
- 3/0 polyglactin (Vicryl) to suture the anastomosis site
- Debakey



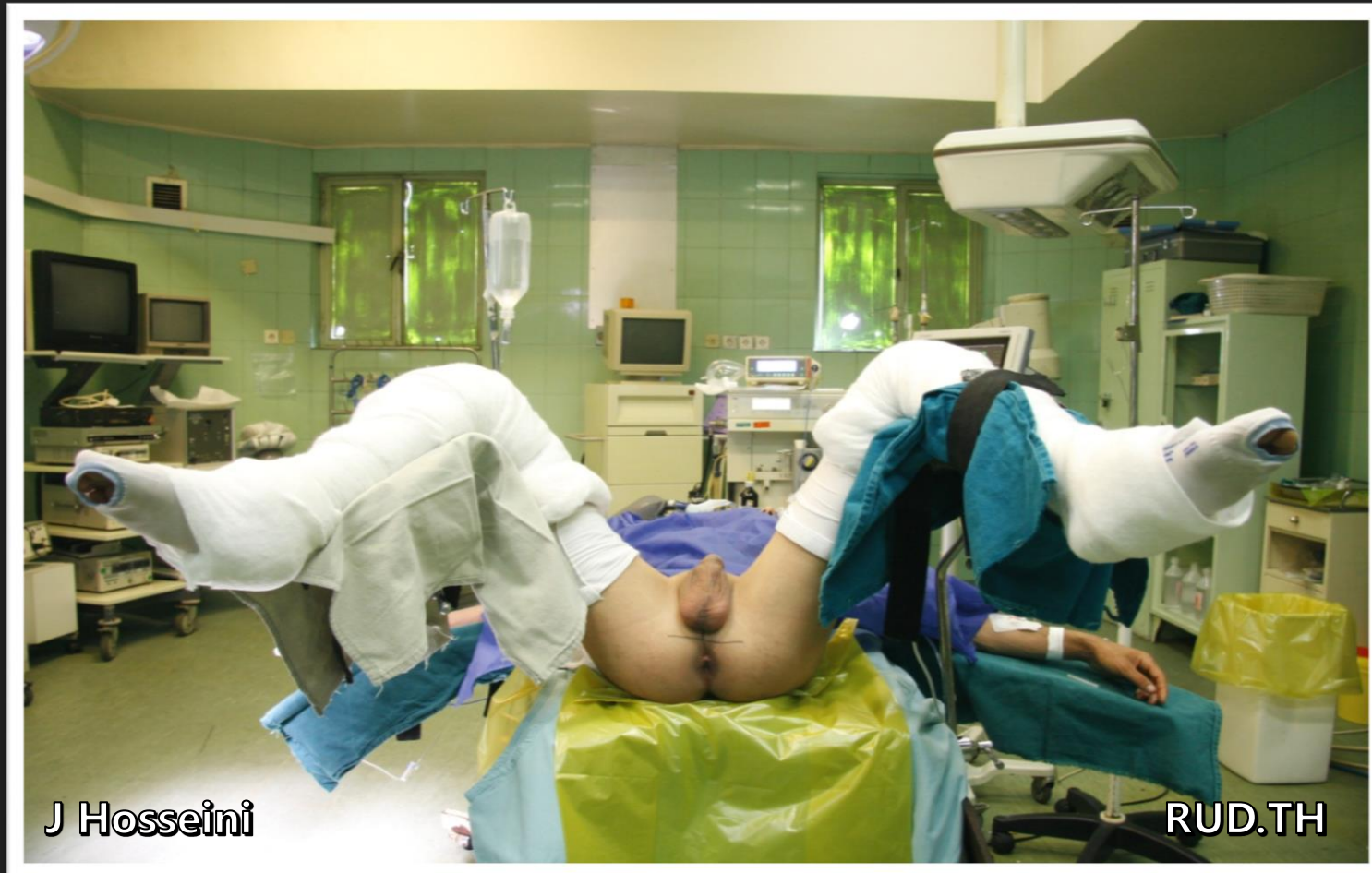
Posterior Urethroplasty

Step By Step

Our selected method in operation :

- Lithotomy position
- Setting of small cotton or gelatinized pillow under the thigh
- Straight perineal incision on the median raphe.

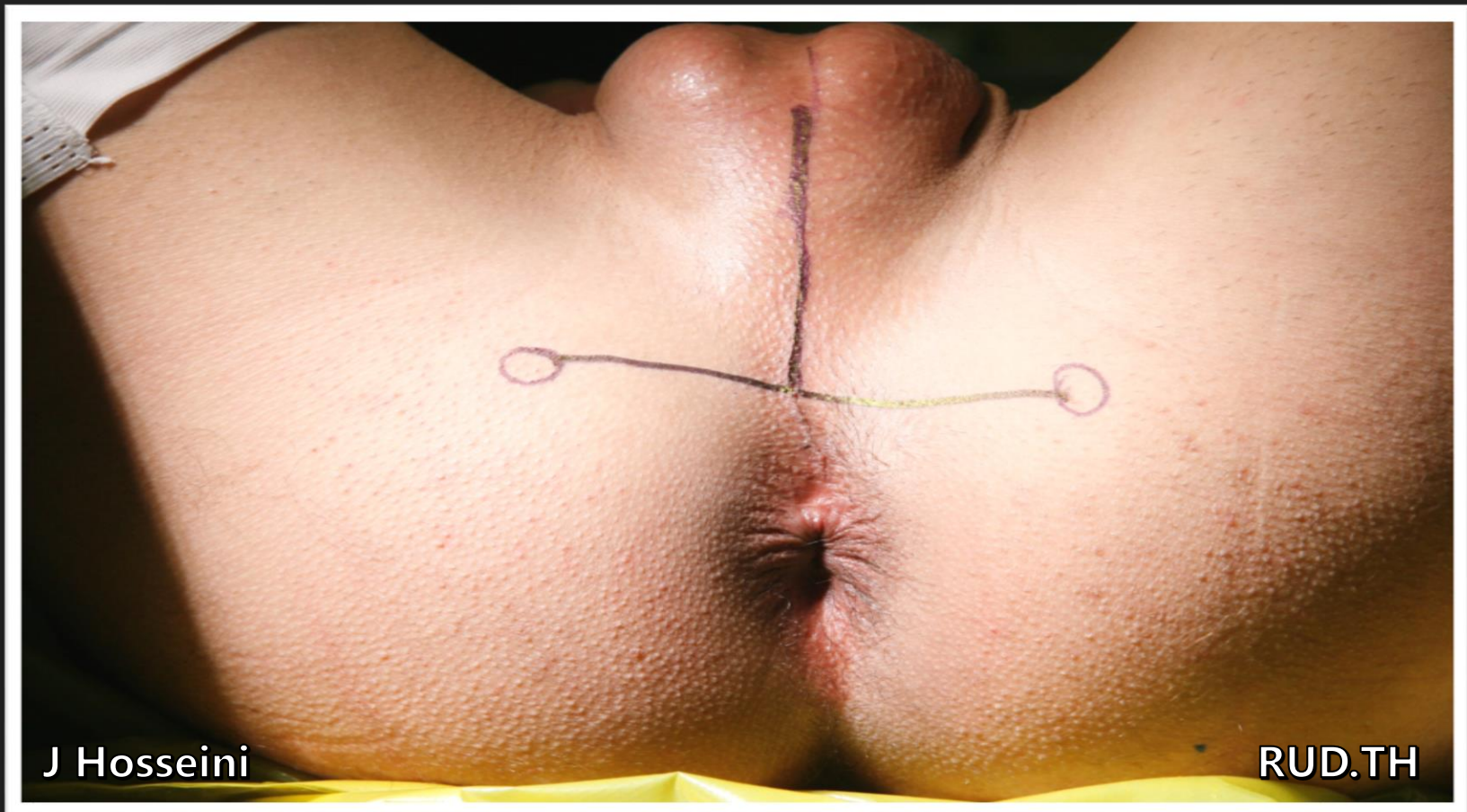
Simple lithotomy position



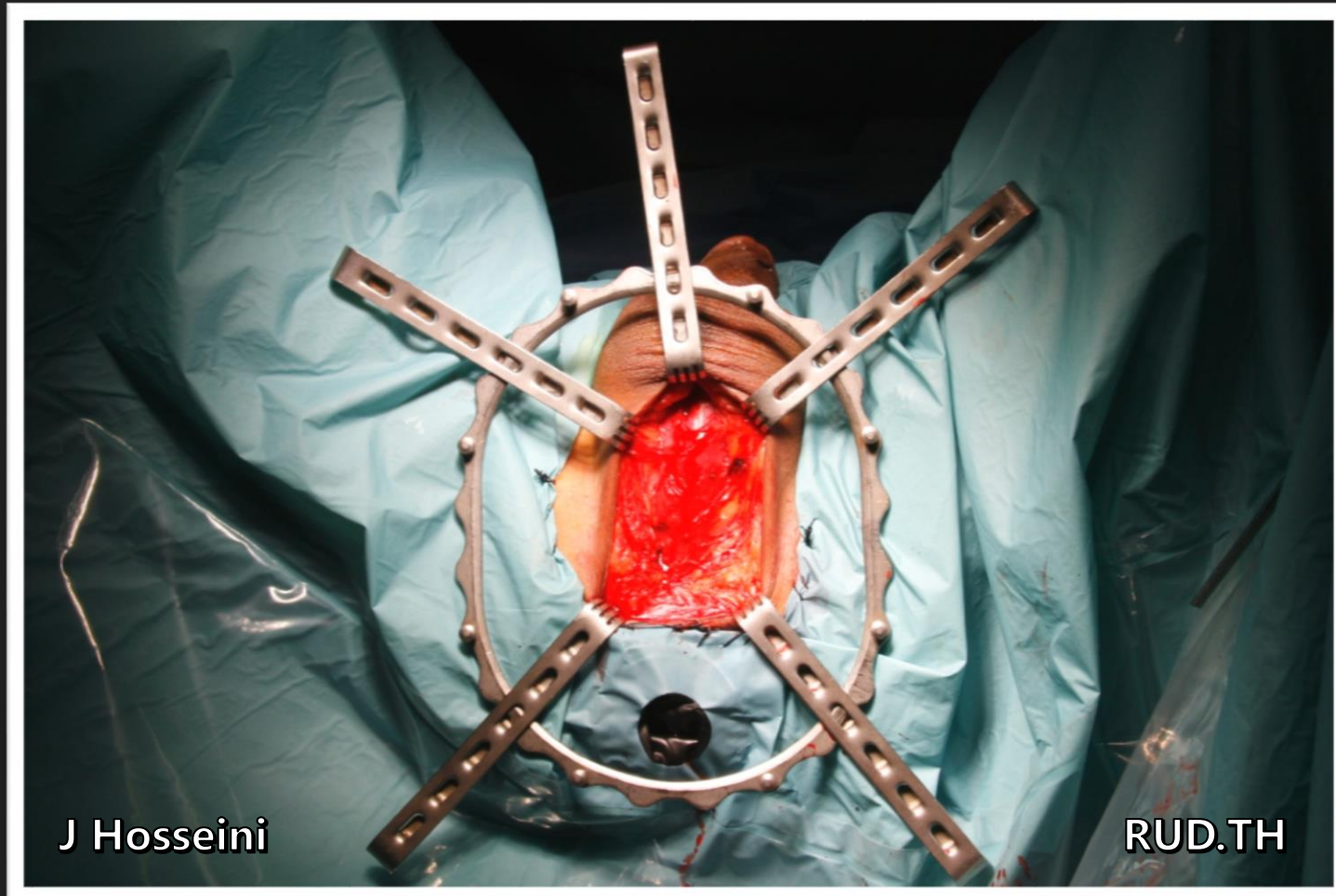
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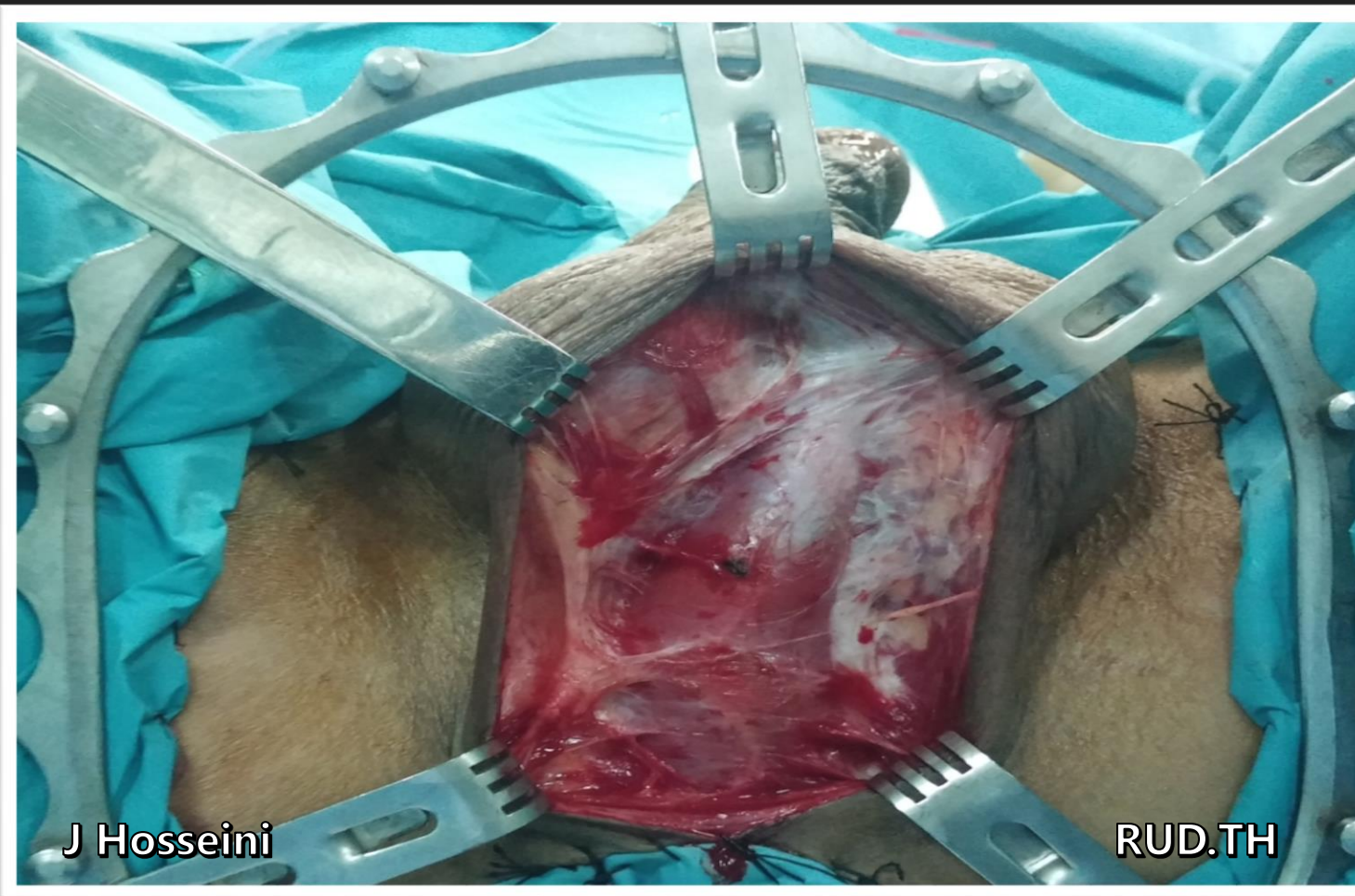
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A midline incision from beneath the scrotum and carried sharply down to the midline fusion of the ischiocavernosus



Place a turner warwick retractor

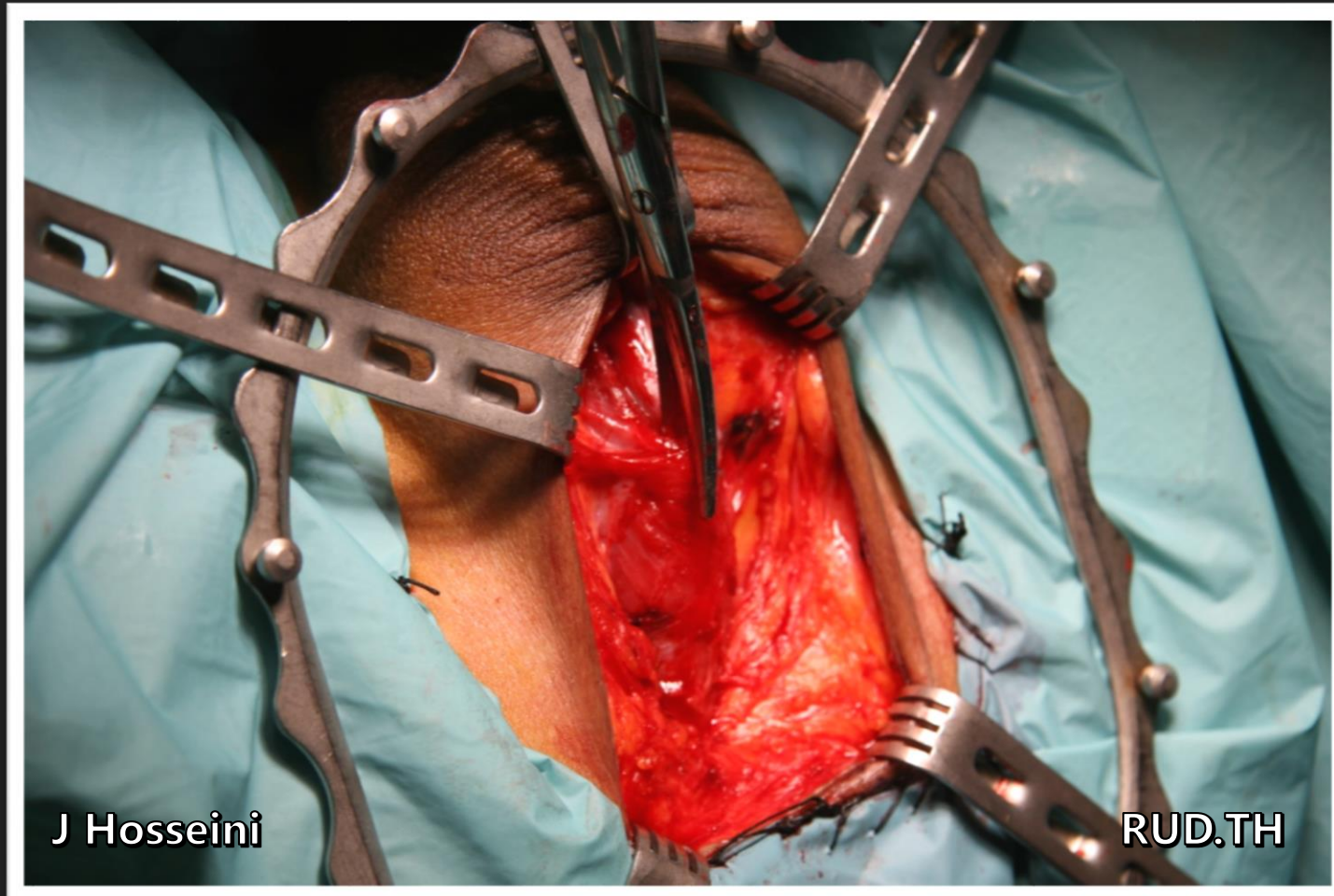




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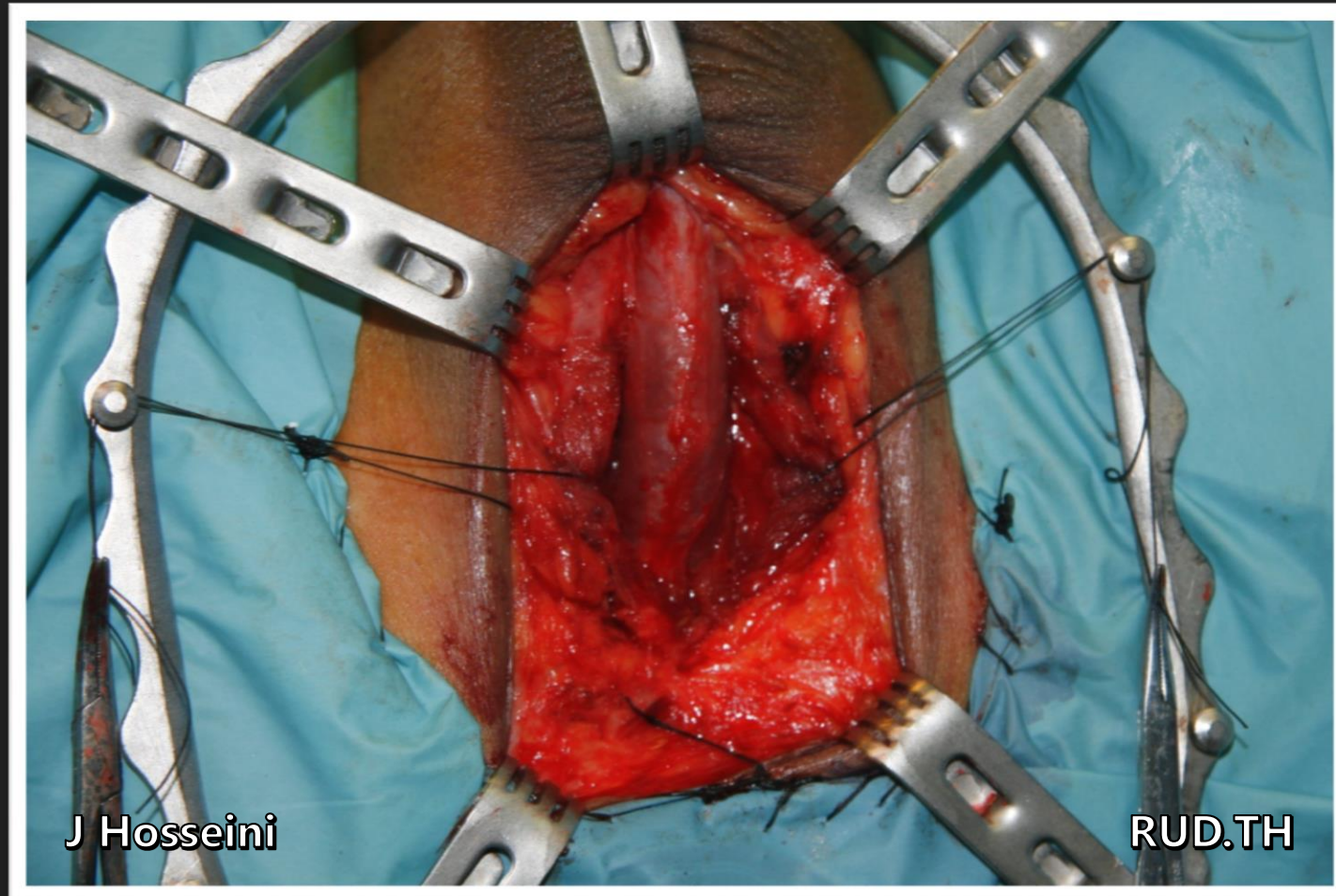
An incision in the midline of BulboSpongiosus.M exposing the length of the bulb



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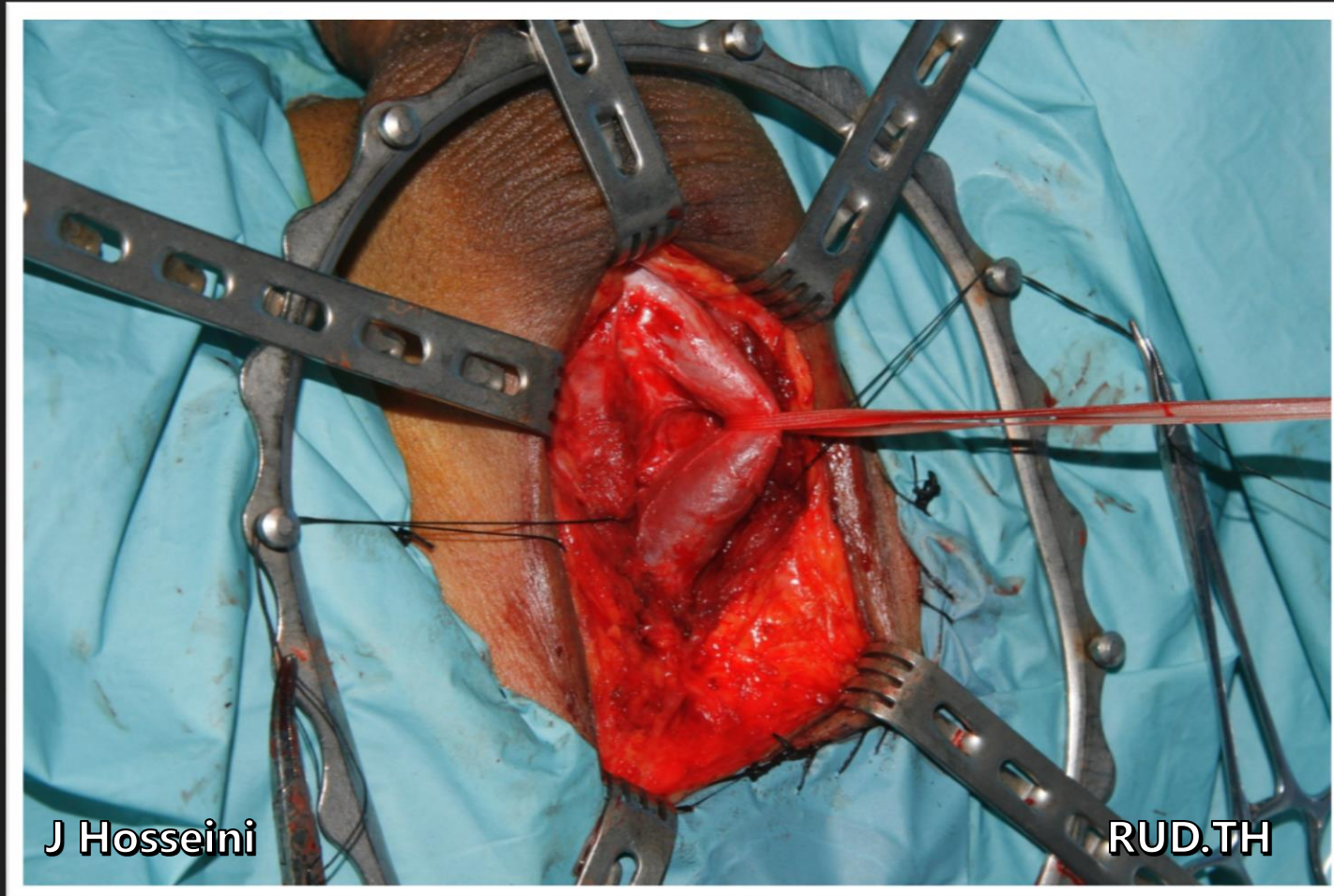
The ischiocavernosus muscle is retracted
the full length of the BulboPenile Urethra



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The corpus spongiosum is detached from the triangular ligament and corpora cavernosa

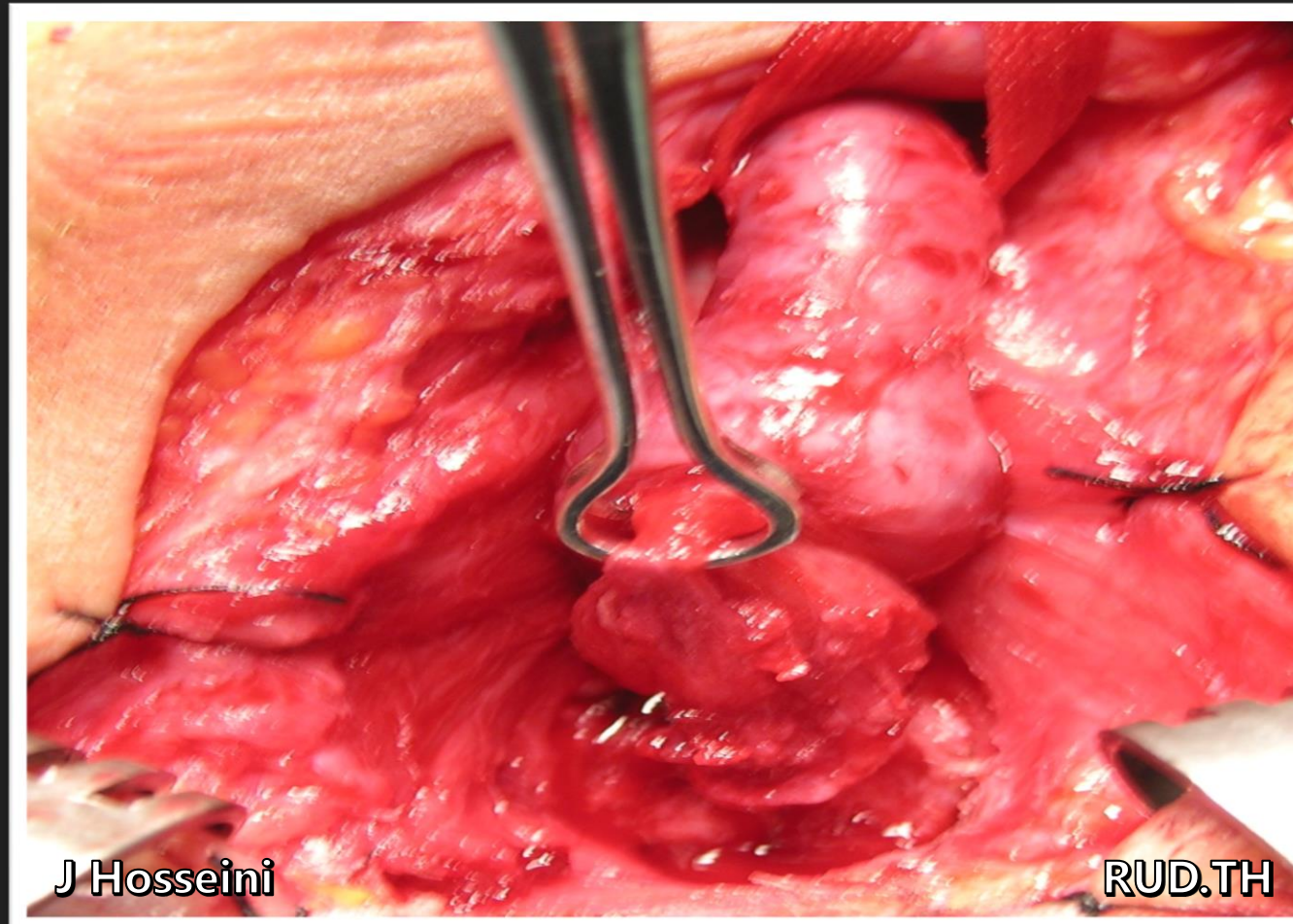


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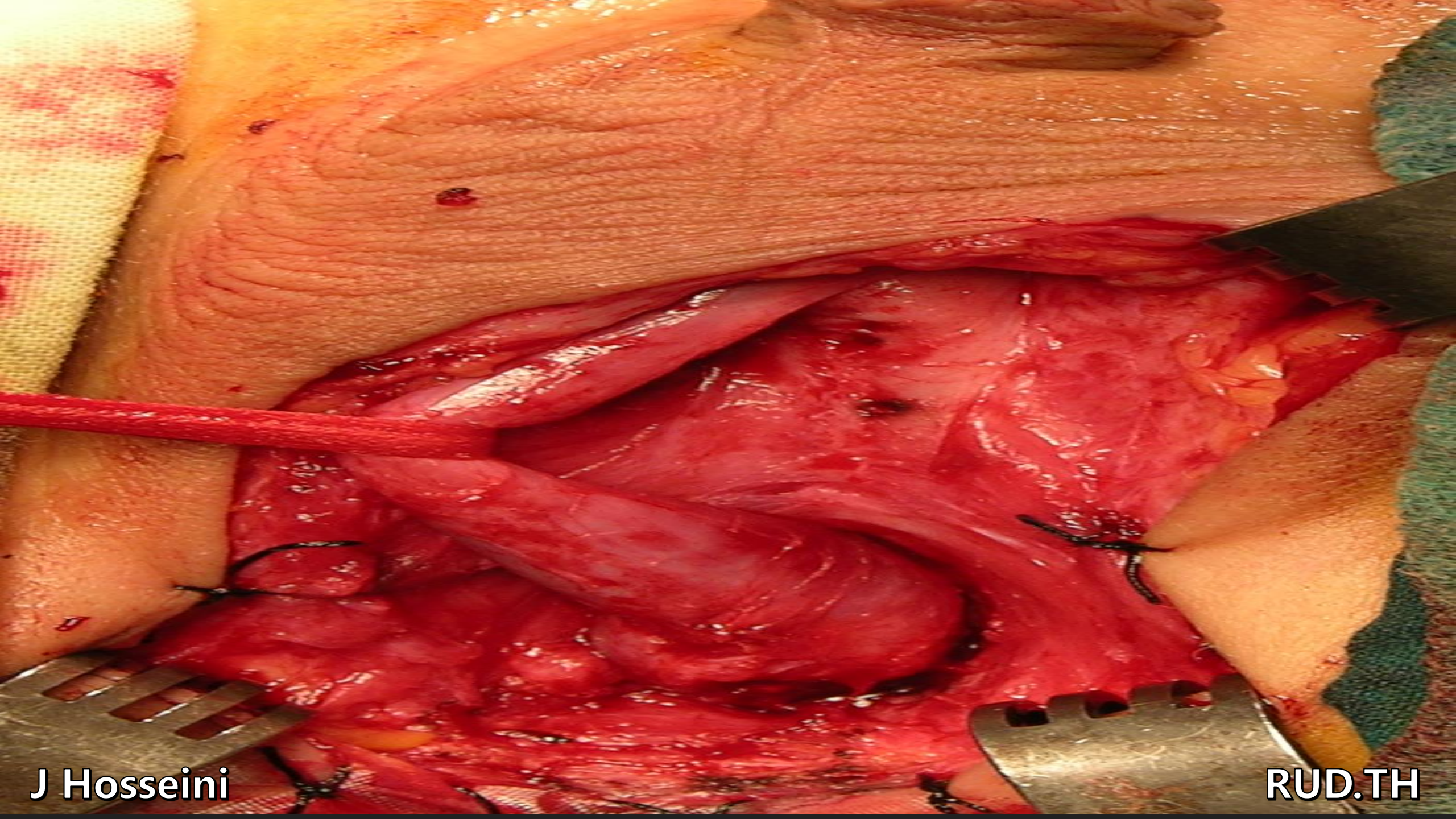
**Bulbospongiosum is detached from the
perineal body**

Dissection is carried further down to the infrapubic space

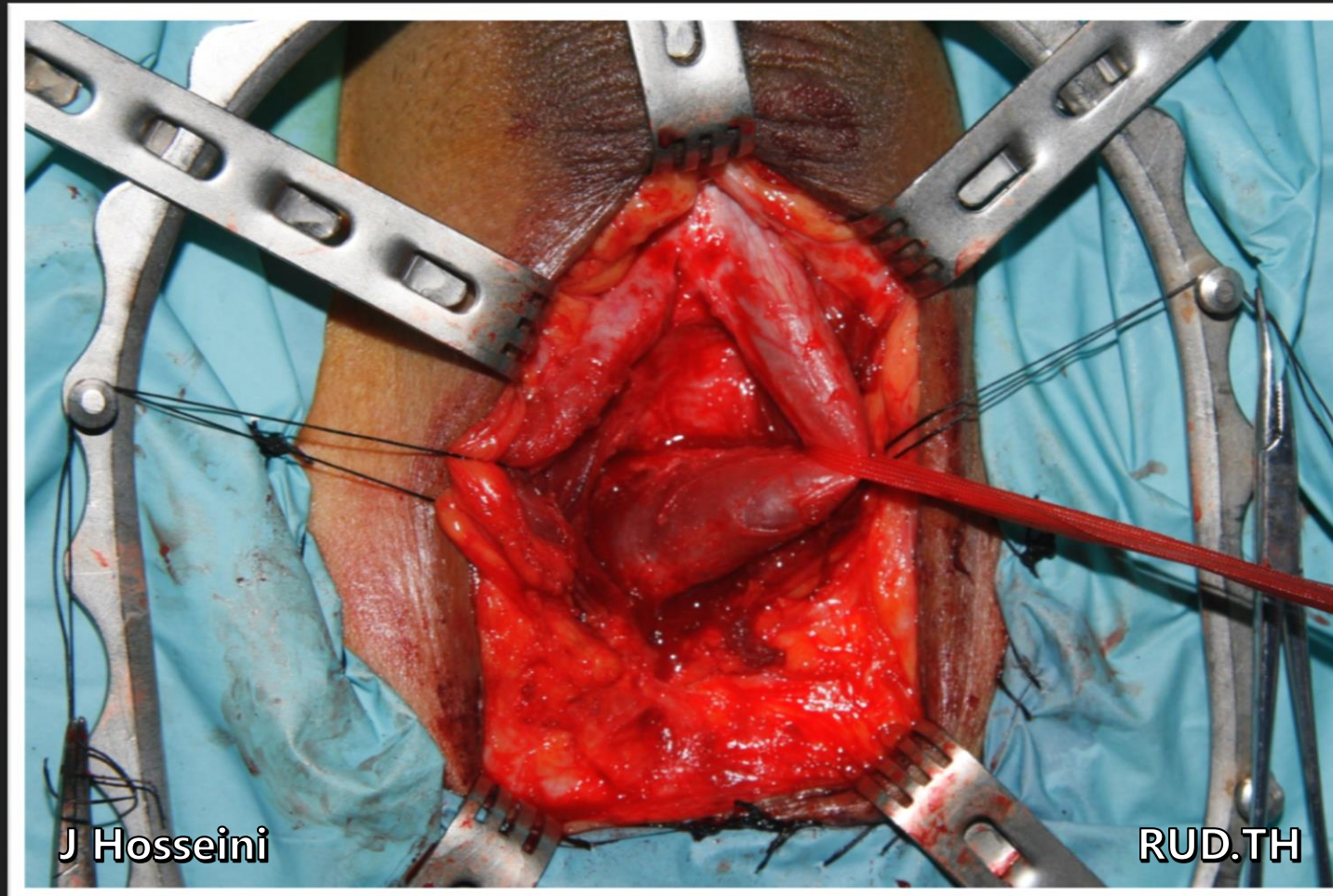


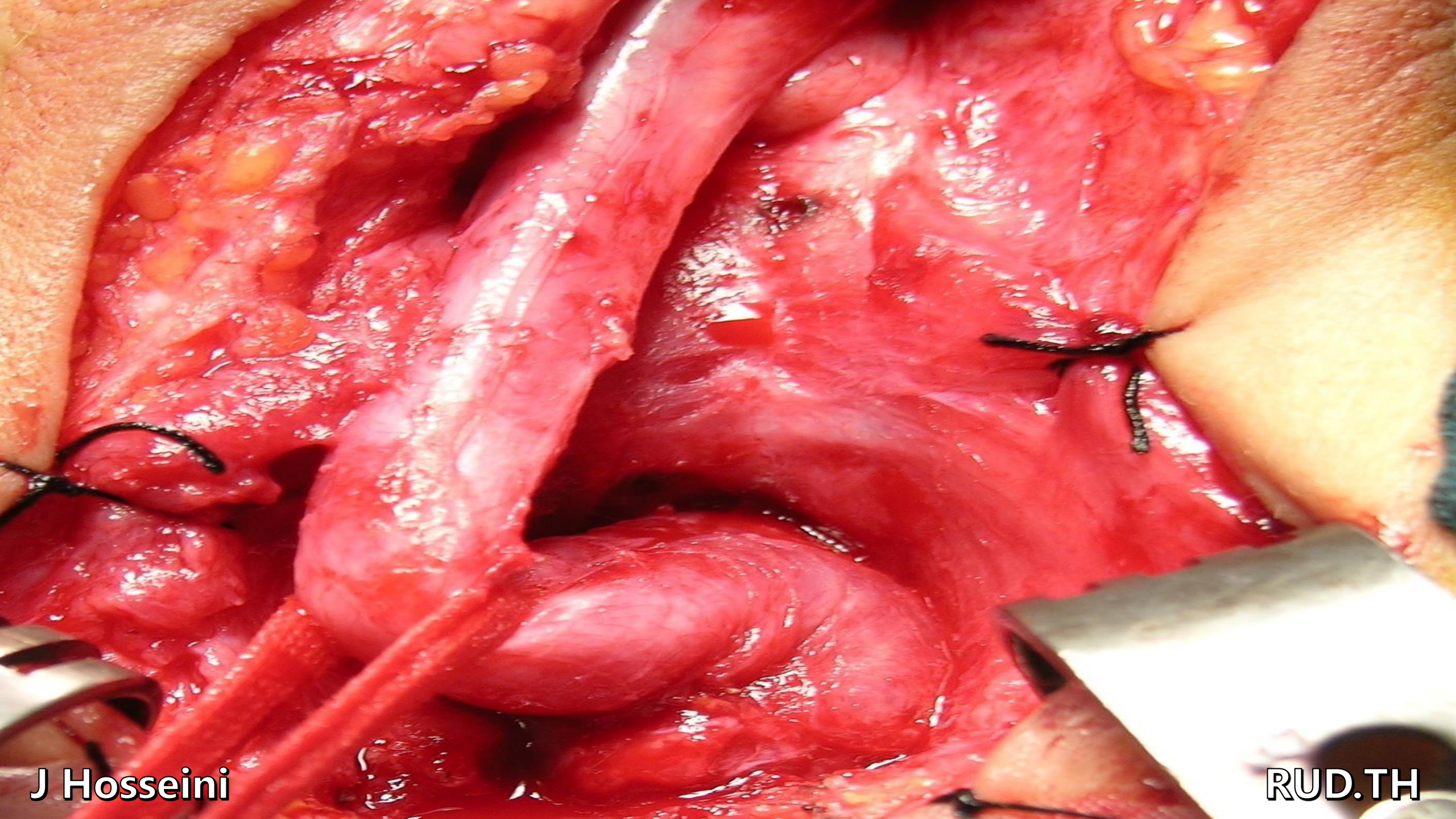
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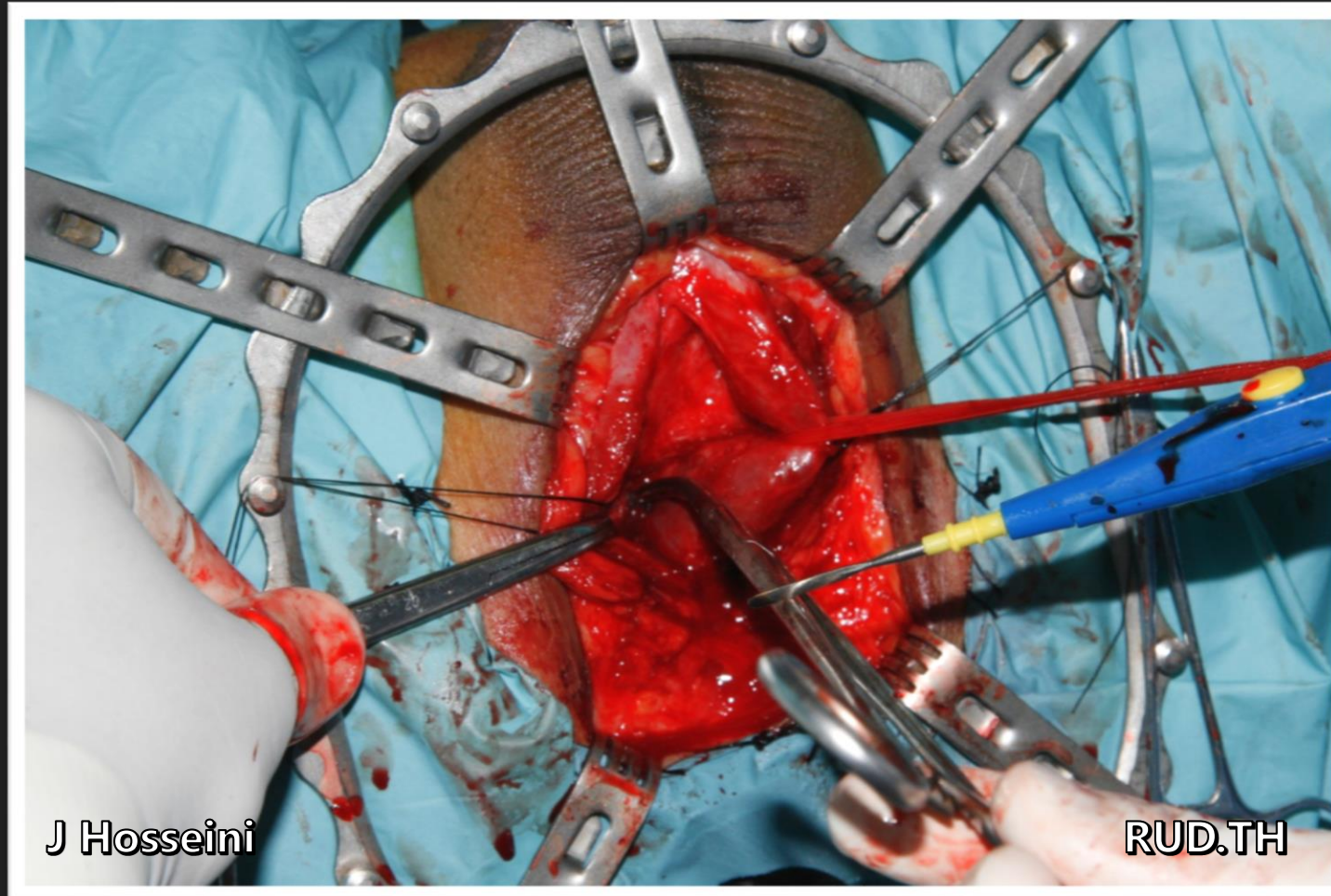


Posterior detachment of the bulbospongiosum Dissection is eventually carried through the area of fibrosis





Proximal blood supplies are easily controlled with a sharp tip hemostat and monopolar cautery



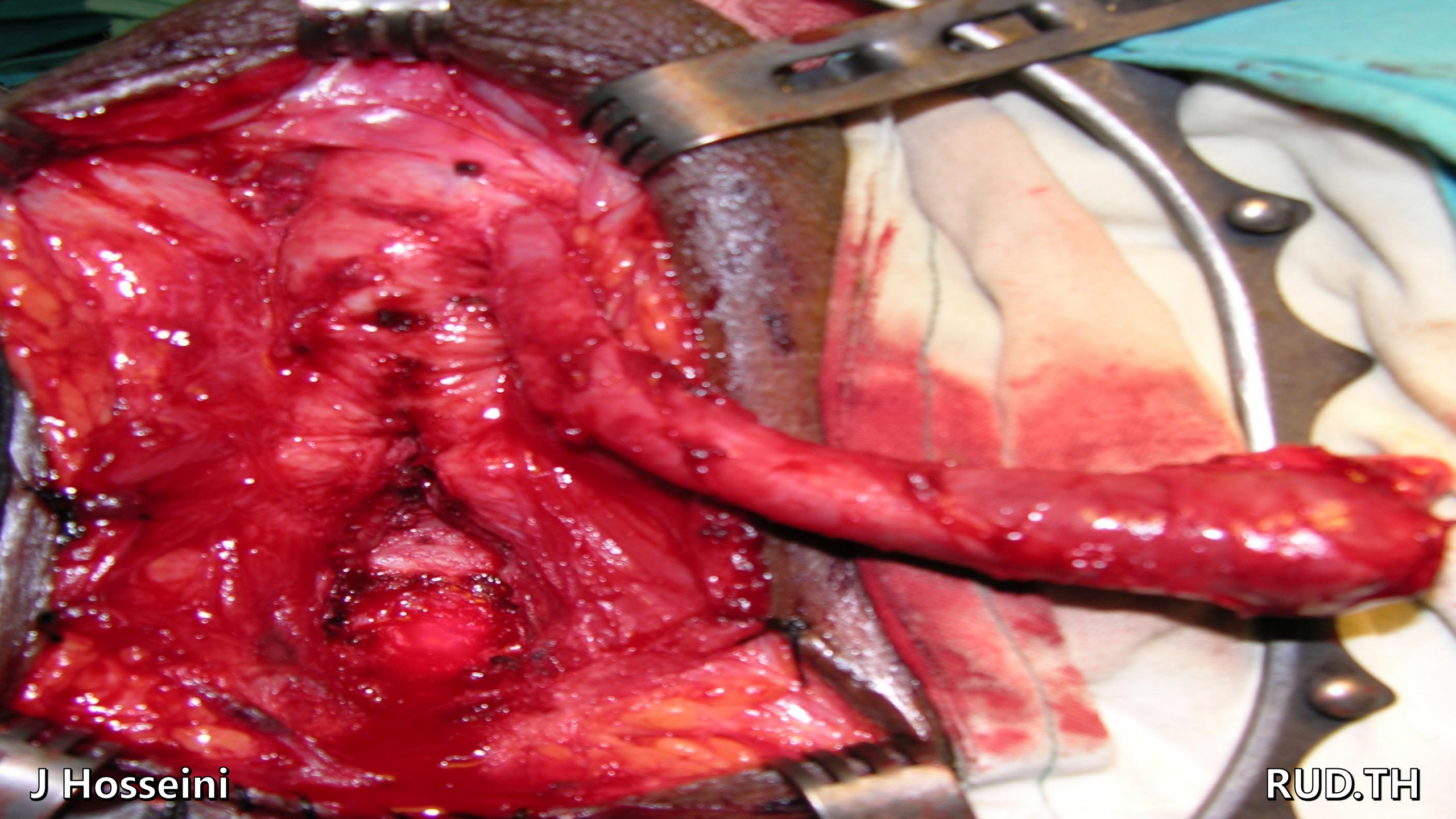
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Posterior Urethroplasty

Step By Step

- No opening ,Be Sure to reach to the real Fibrotic Urethral End
- Cutting the Urethra through Fibrosis
- Check obliteration of Anterior Urethra
- Observe Fibrosis on Posterior Urethra

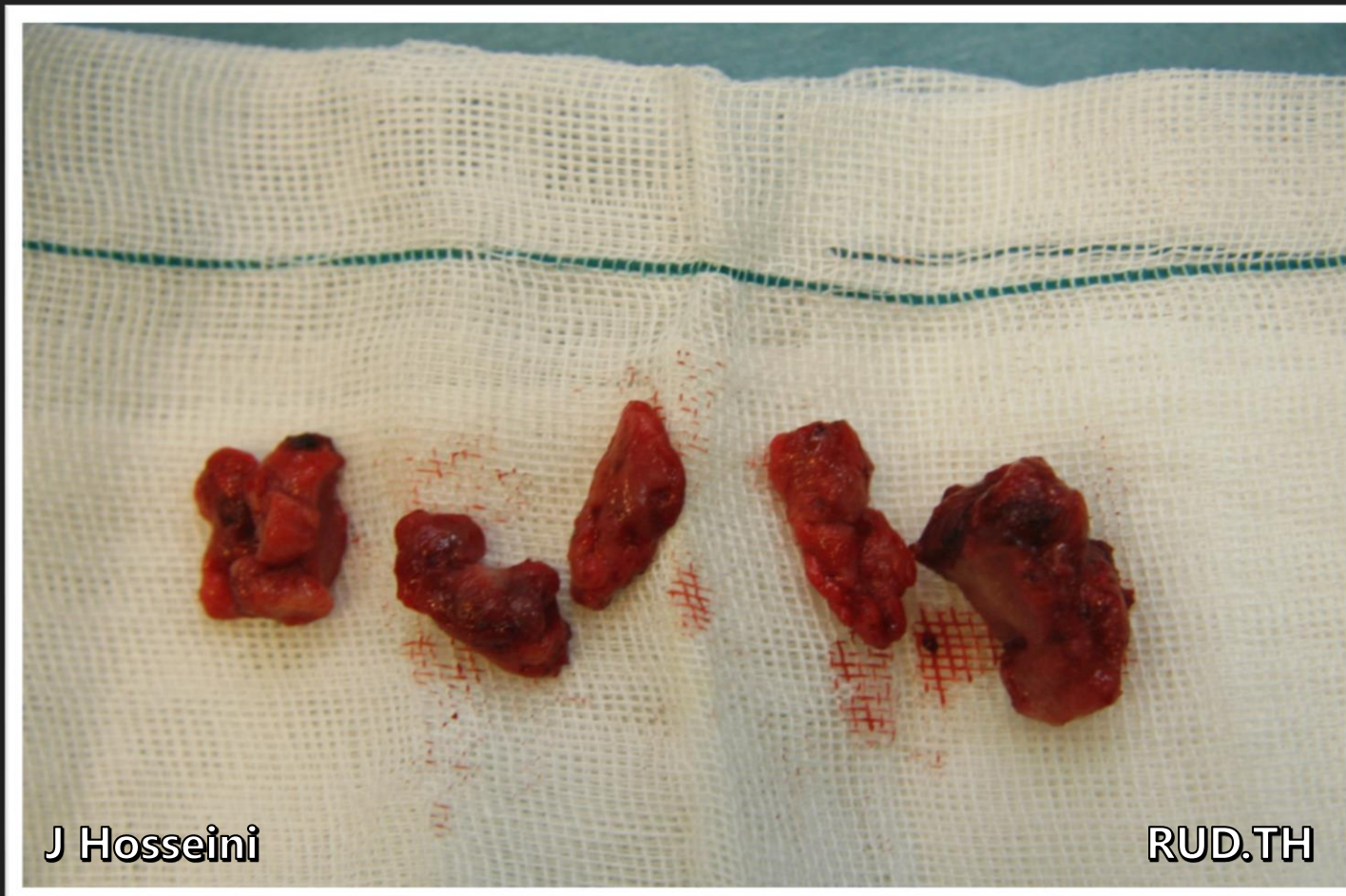


Posterior Urethroplasty

Step By Step

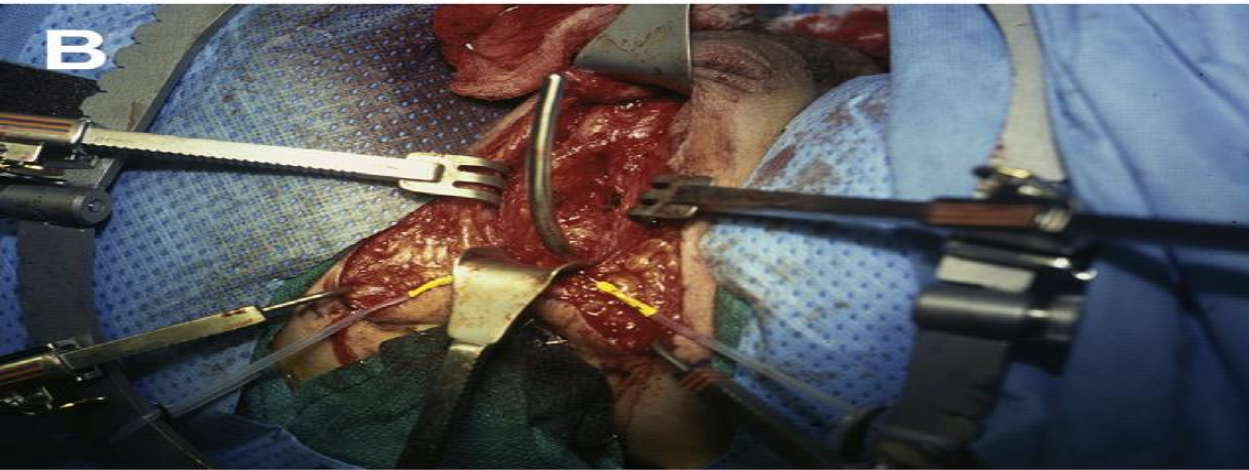
- Remove all Fibrosis tissues from Proximal Urethra
- To reach Normal Prostatic Tissue

The fibrosis is resected From Proximal Urethra until Open Proximal Urethra



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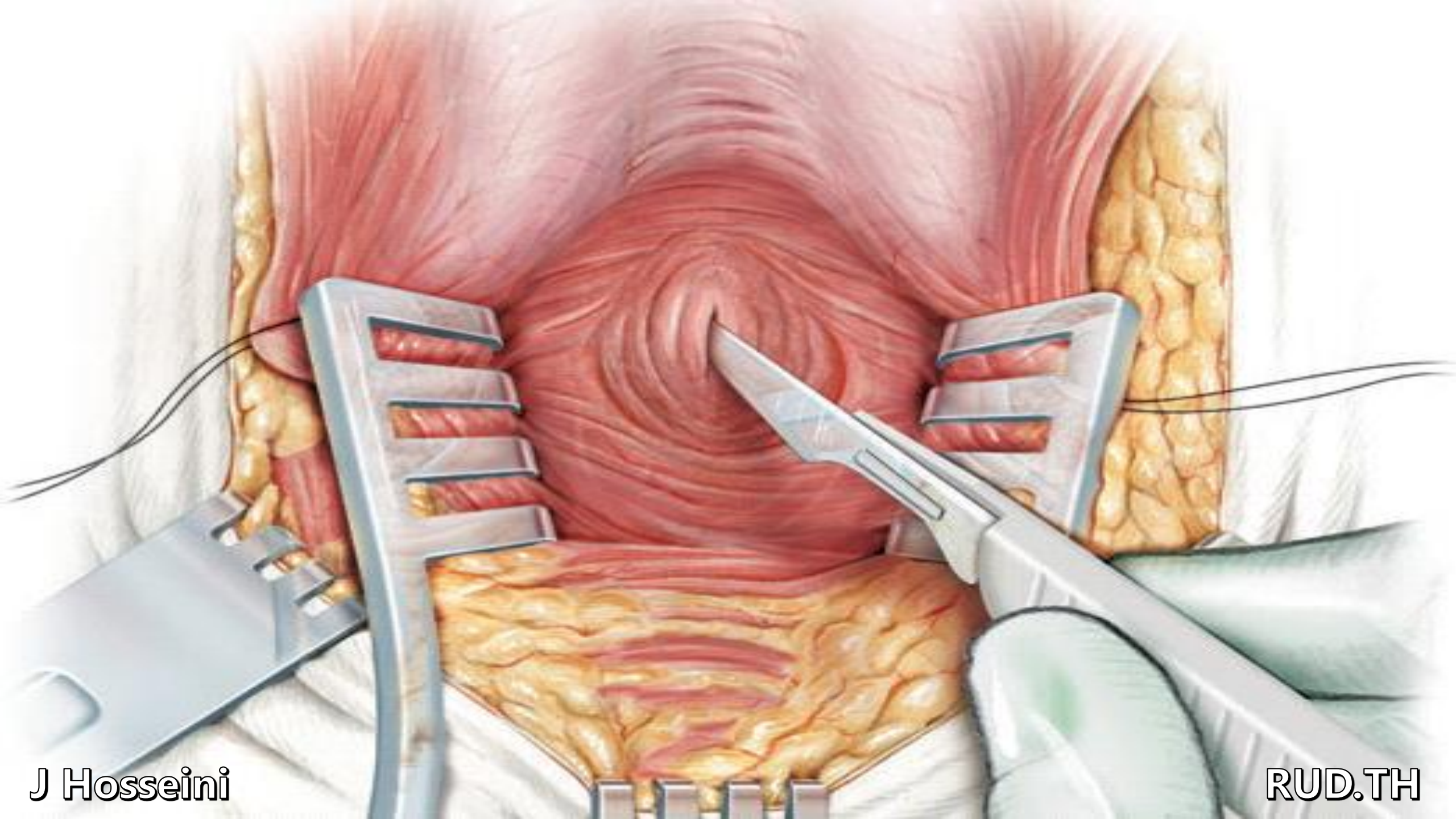
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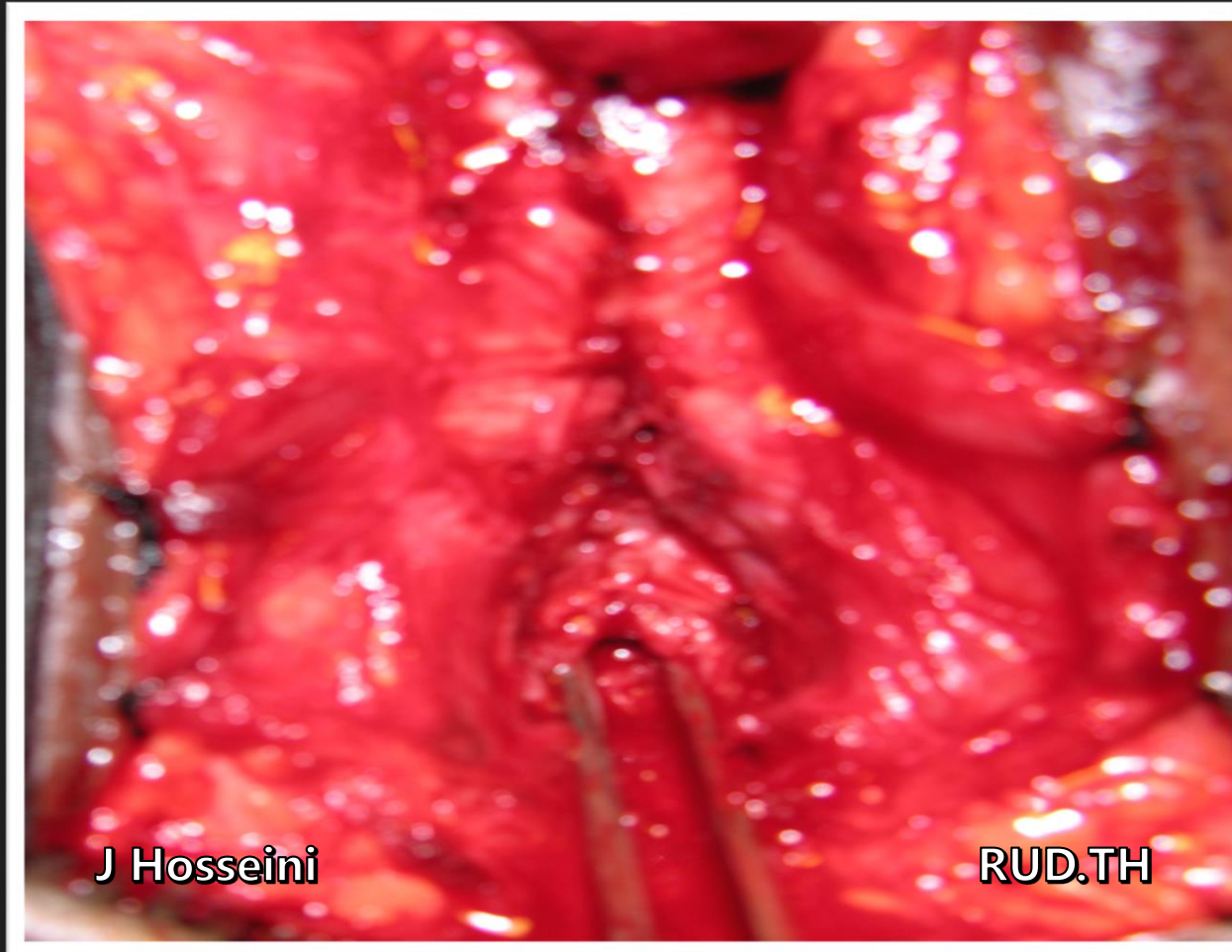
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Introduce a flexible cystoscope into the suprapubic tract and through the bladder neck to the end of the posterior urethra



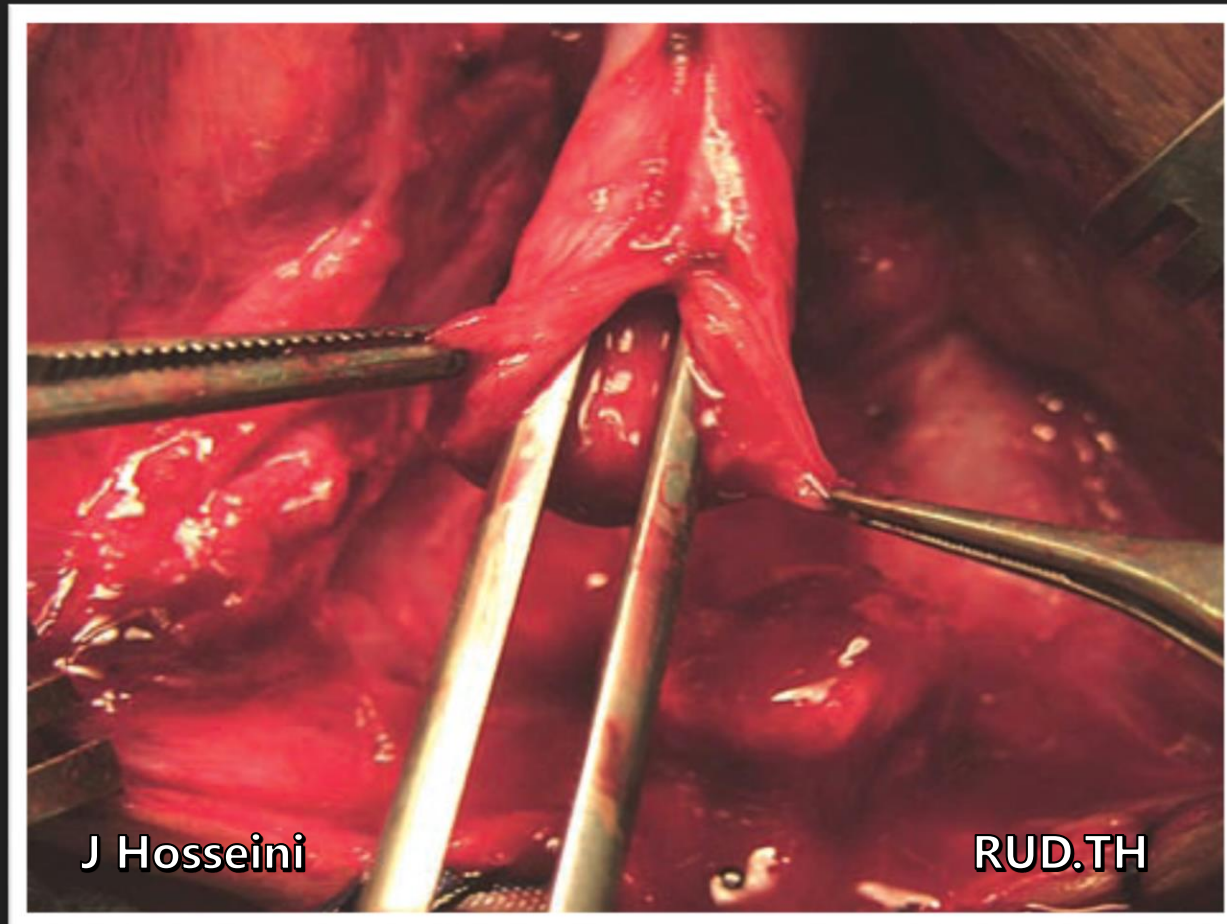
After the removal of the scar and fibrotic tissue, the proximal end of urethra is spatulated in the position of 12 o'clock



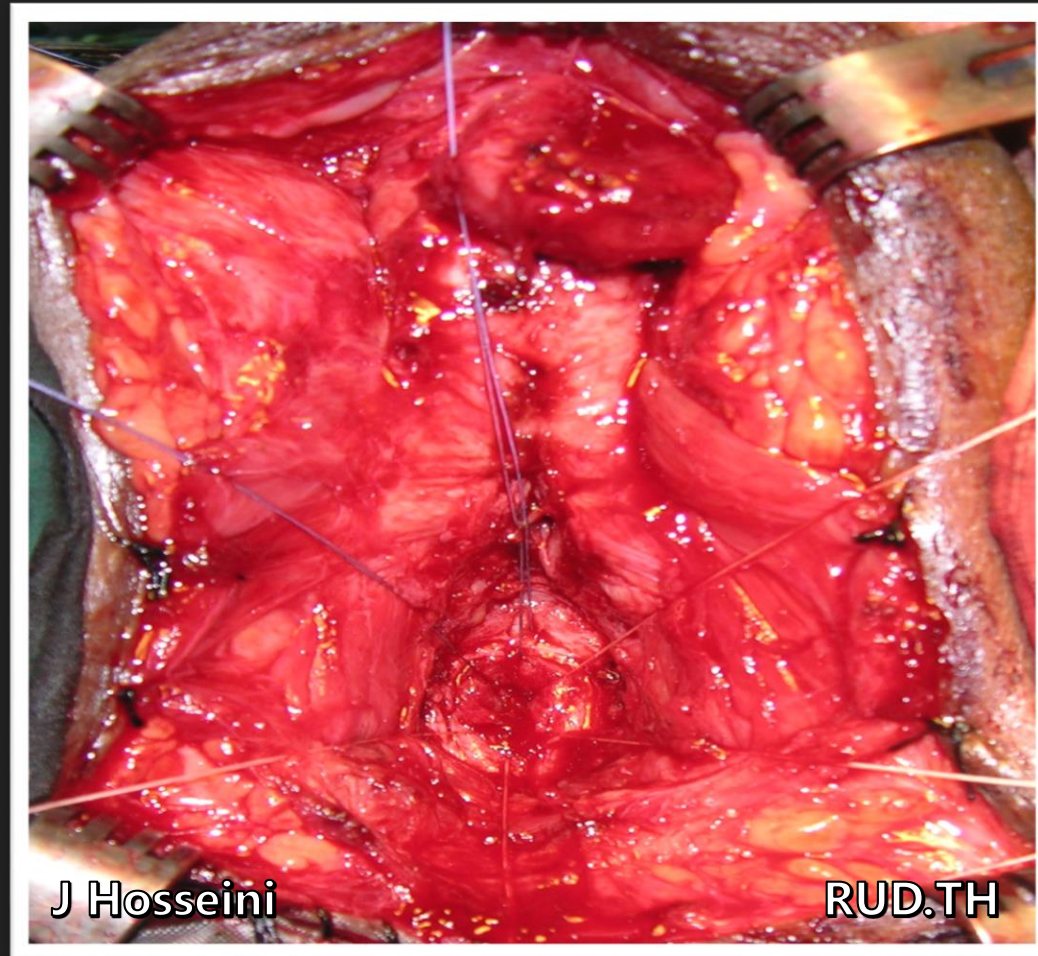
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The Distal end of urethra is also spatulated in the opposite direction



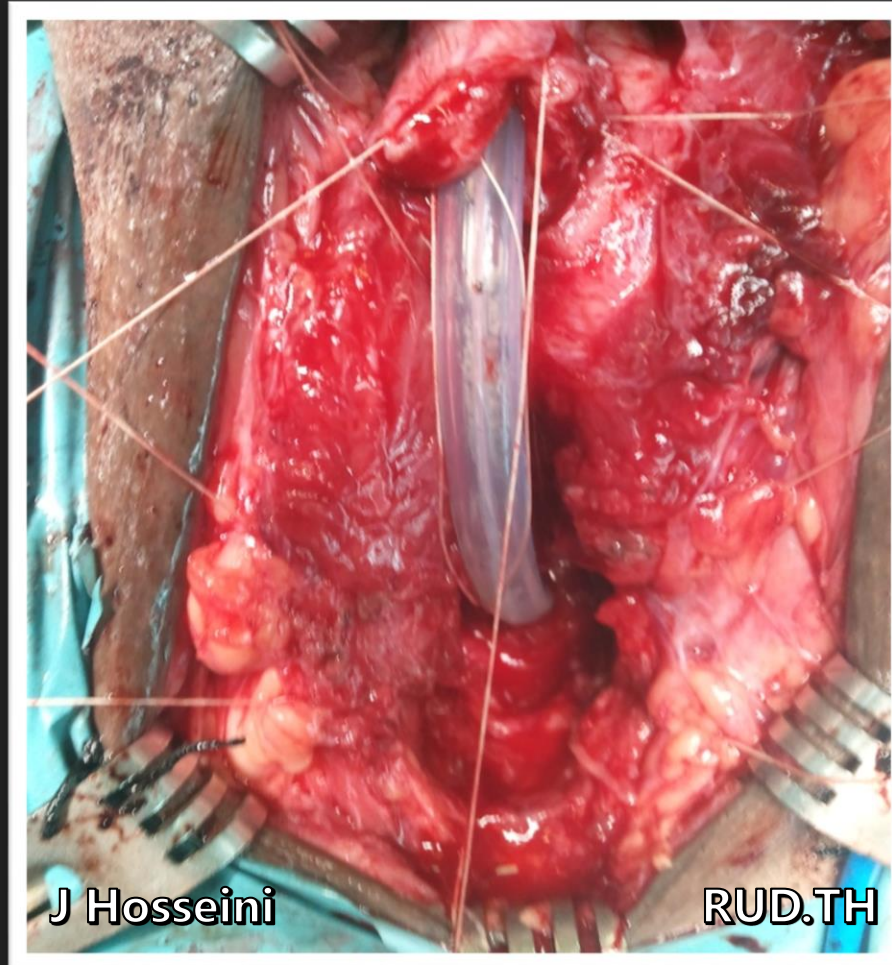
placement of the 6 anastomotic sutures 3/0 polyglactin (Vicryl) in Posterior Urethra



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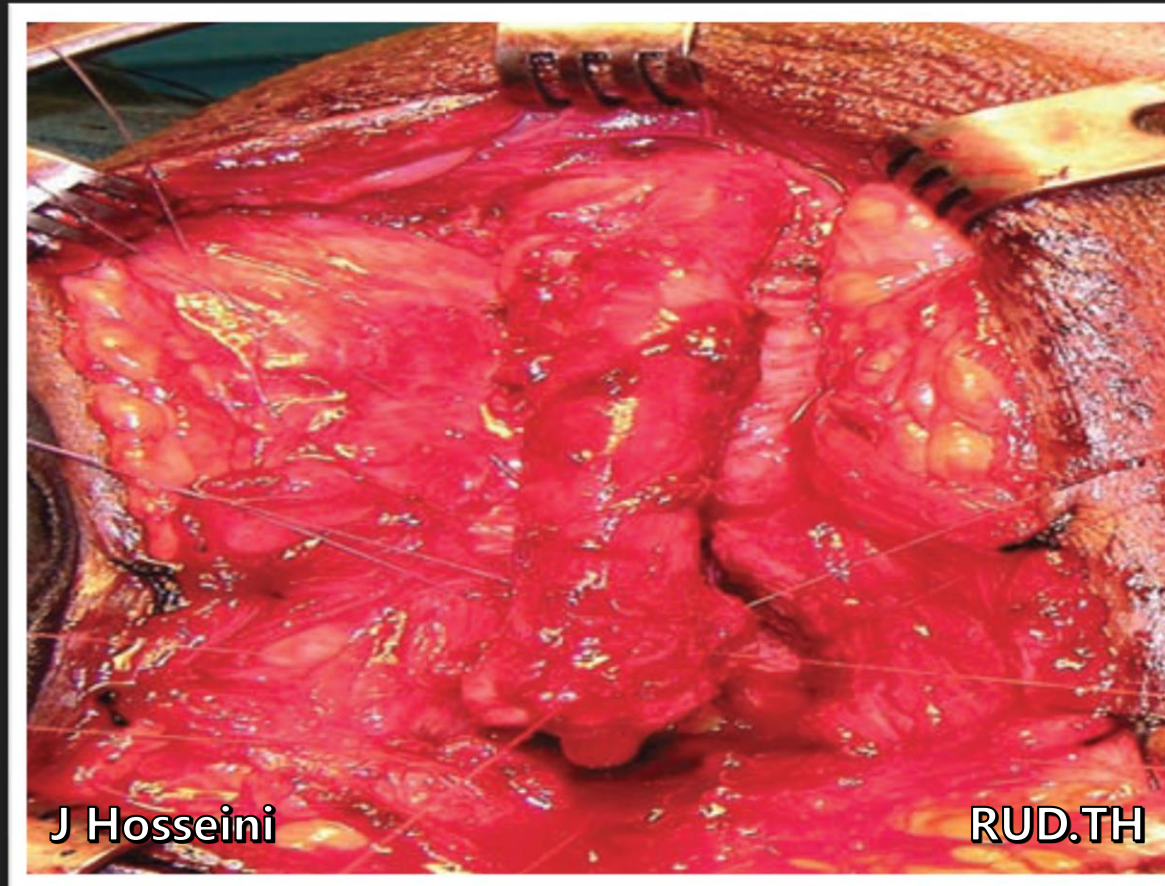
Before seating the anastomosis, we introduce a 18F soft silicone (Silastic) urethral stenting catheter through the anastomosis under direct vision



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Anastomosis of the two ends - mucus to mucus around the urethral catheter



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Posterior Urethroplasty

Step By Step

- bed rest for 24 to 48 hours.
- We recommend even longer bed rest.(Depend to Culture)
- Three to 4 weeks after the operation, the urethral catheter is removed

Posterior Urethroplasty

Step By Step

- Three to 4 weeks after the operation, the urethral catheter is removed :
 - **Pericatheter Urethrogram** before removing or
 - **Voiding cystourethrography** is done through the suprapubic tract.
- If extravasation is absent, the suprapubic catheter is clamped and removed 5 to 7 days later(sometimes 3 Days)

Thank you for your attention !



Ornaments of Ali-Qapu music hall (Early 17th Century) – Isfahan, Iran