Pubovaginal slings

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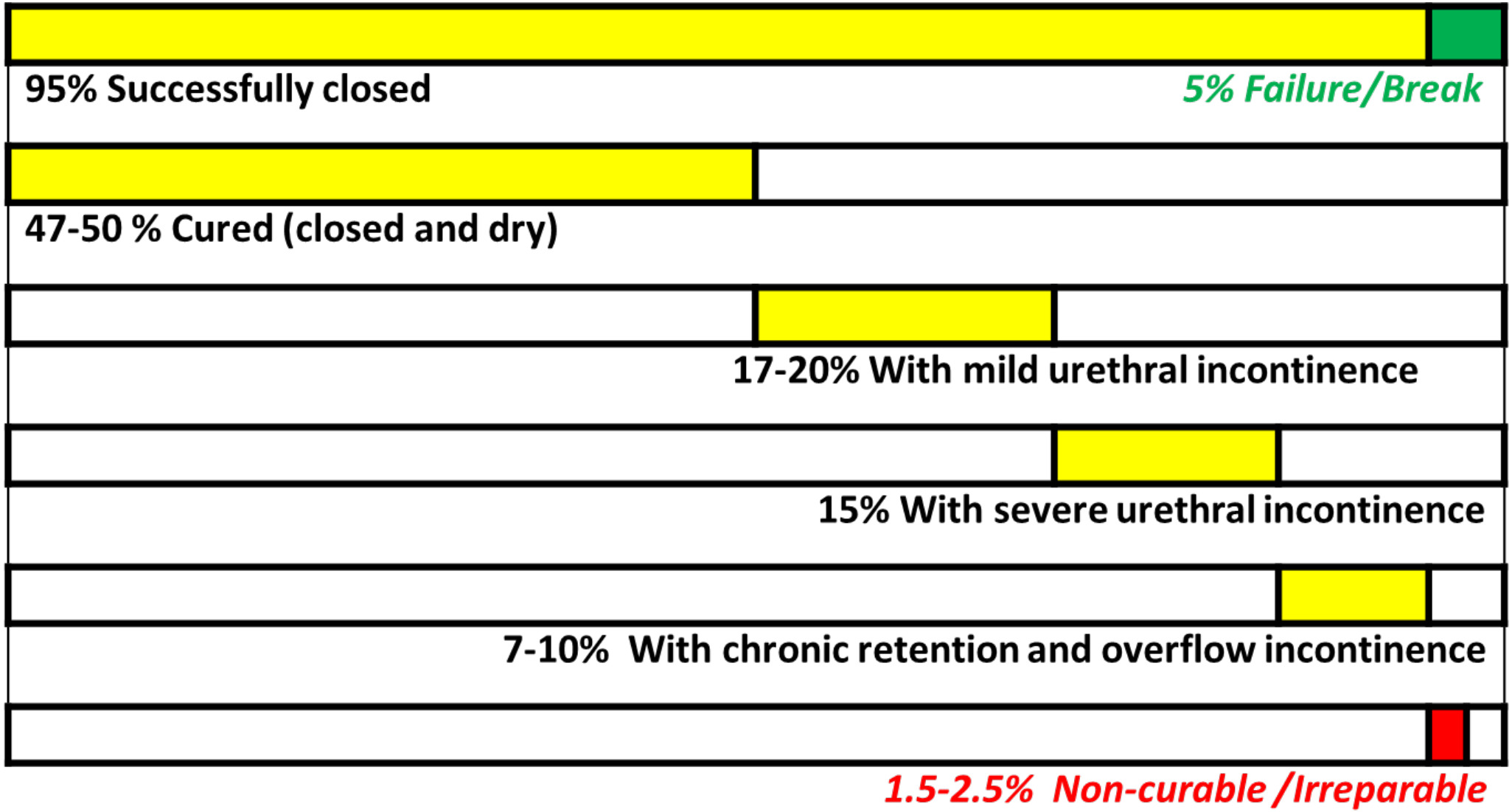
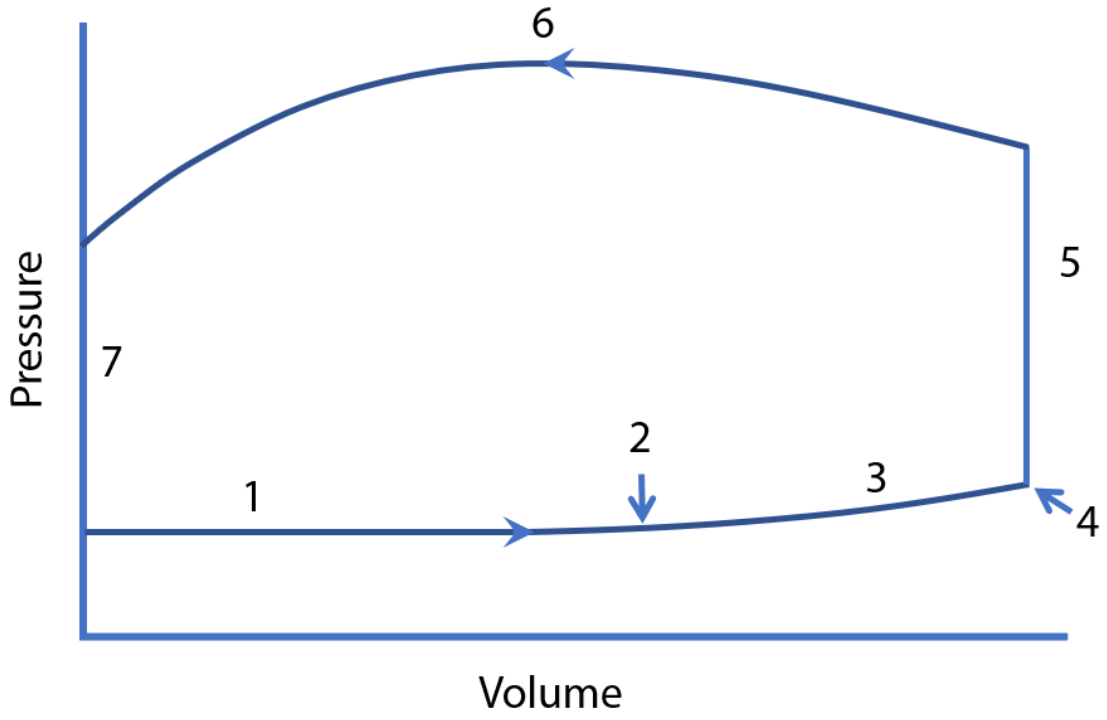
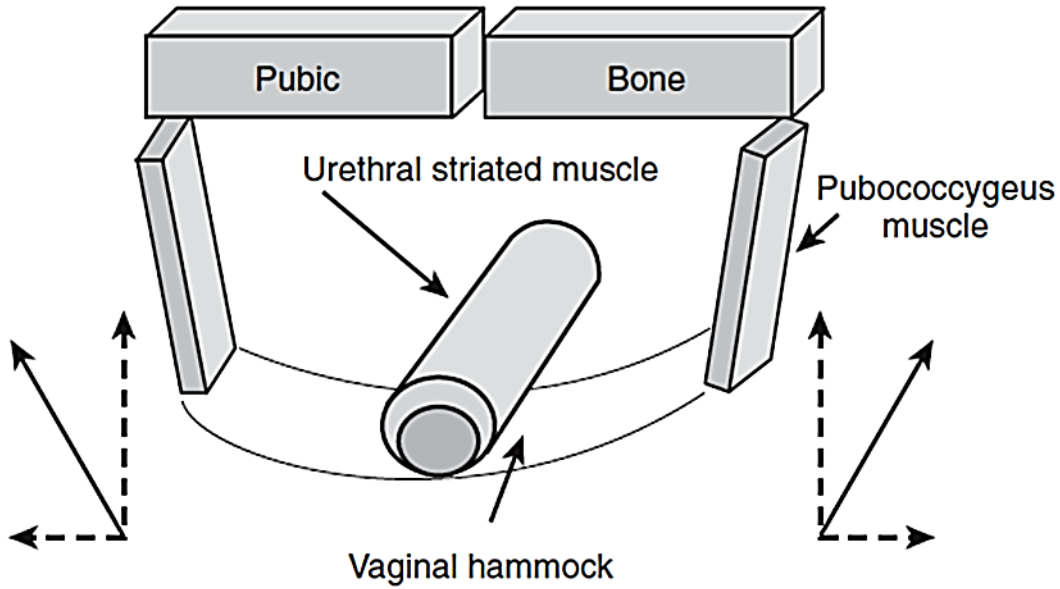
2. Midurethral and Pubovaginal slings
3. Pathologies of post fistula closure urethral incontinence
4. Preoperative and intraoperative considerations of Pubovaginal 'MUS'

1a. Clinical outcomes, post-repair UI VVF



1b. Continence, UB cycle, anatomic components

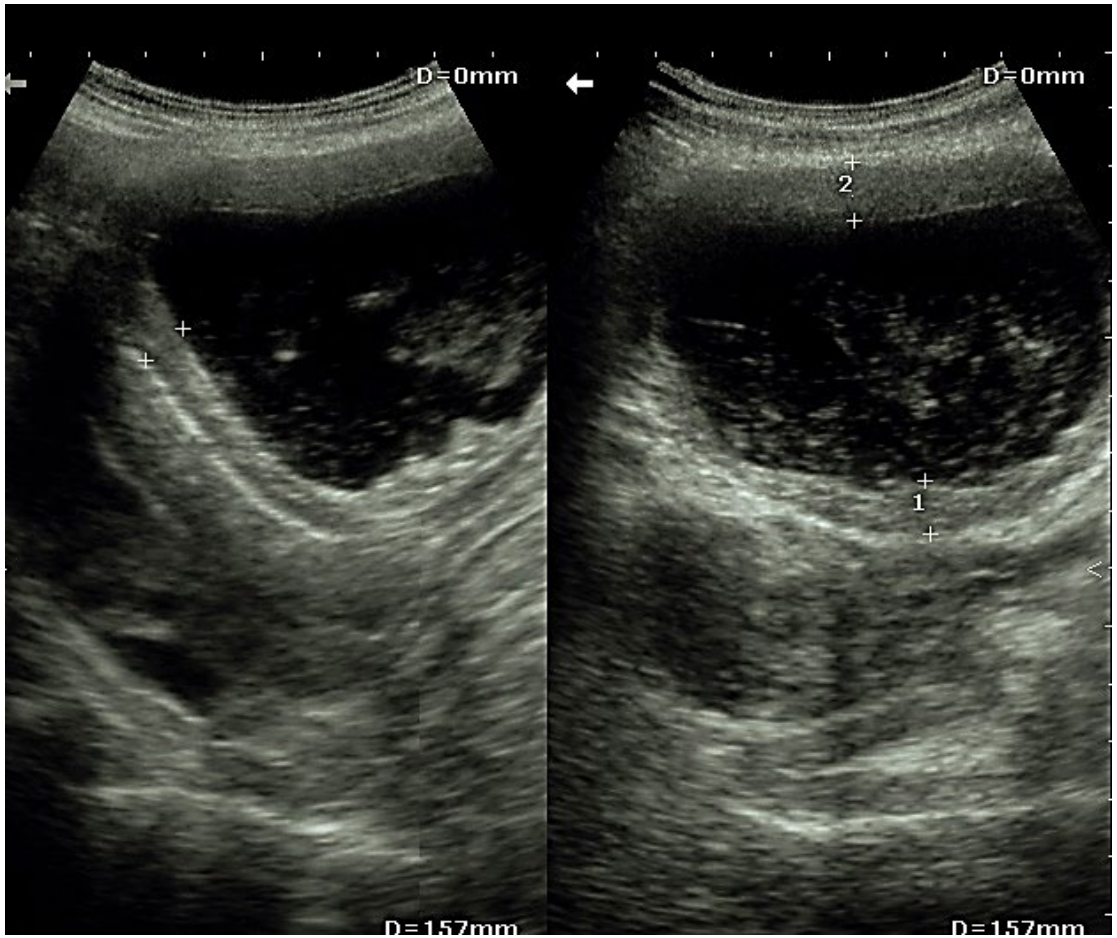


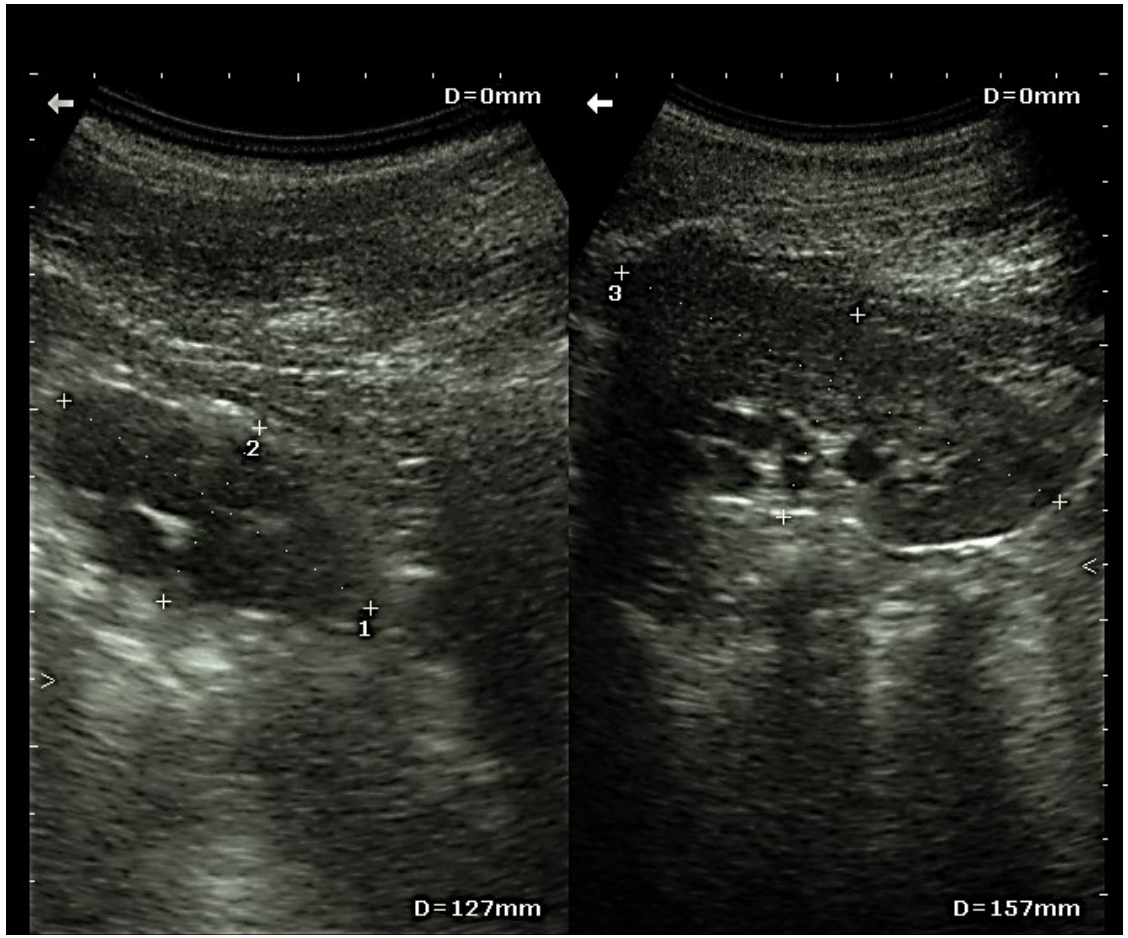


1c. Lower Urinary Tract Symptoms (LUTS)

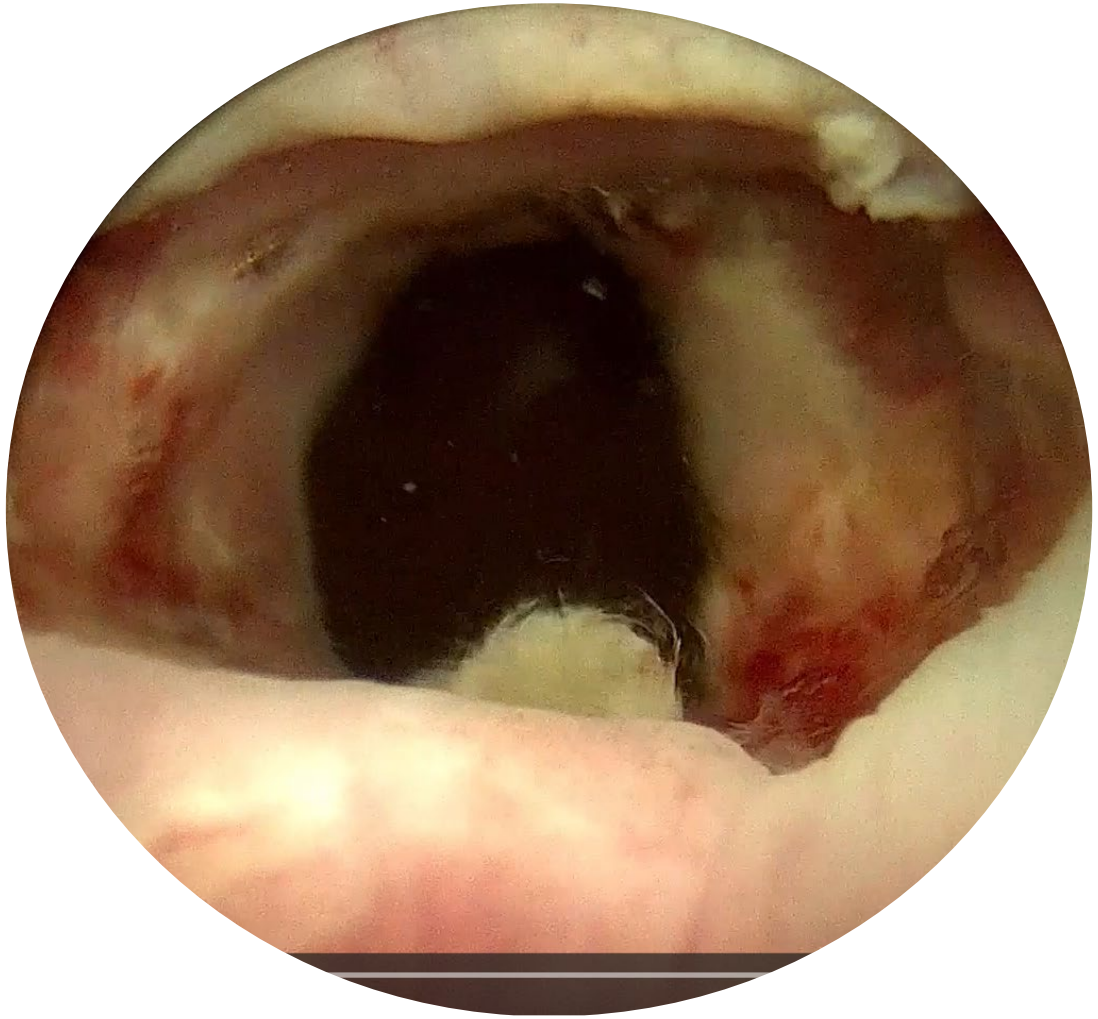
STORAGE DISORDERS **(Incontinence: Urgency, Stress, Frequency, Nocturia, Enuresis)**	**VOIDING / EMPTYING DISORDERS** **(Straining, Hesitancy Incomplete emptying, Poor stream, Intermittency, Postmicturition dribbling)**
SENSATION DISORDERS **(Urgency, Dysuria, Absent sensation, Painful bladder)**	**DISORDERS OF BLADDER CONTENTS** **(Foreign body, Stones, Bladder tumor)**

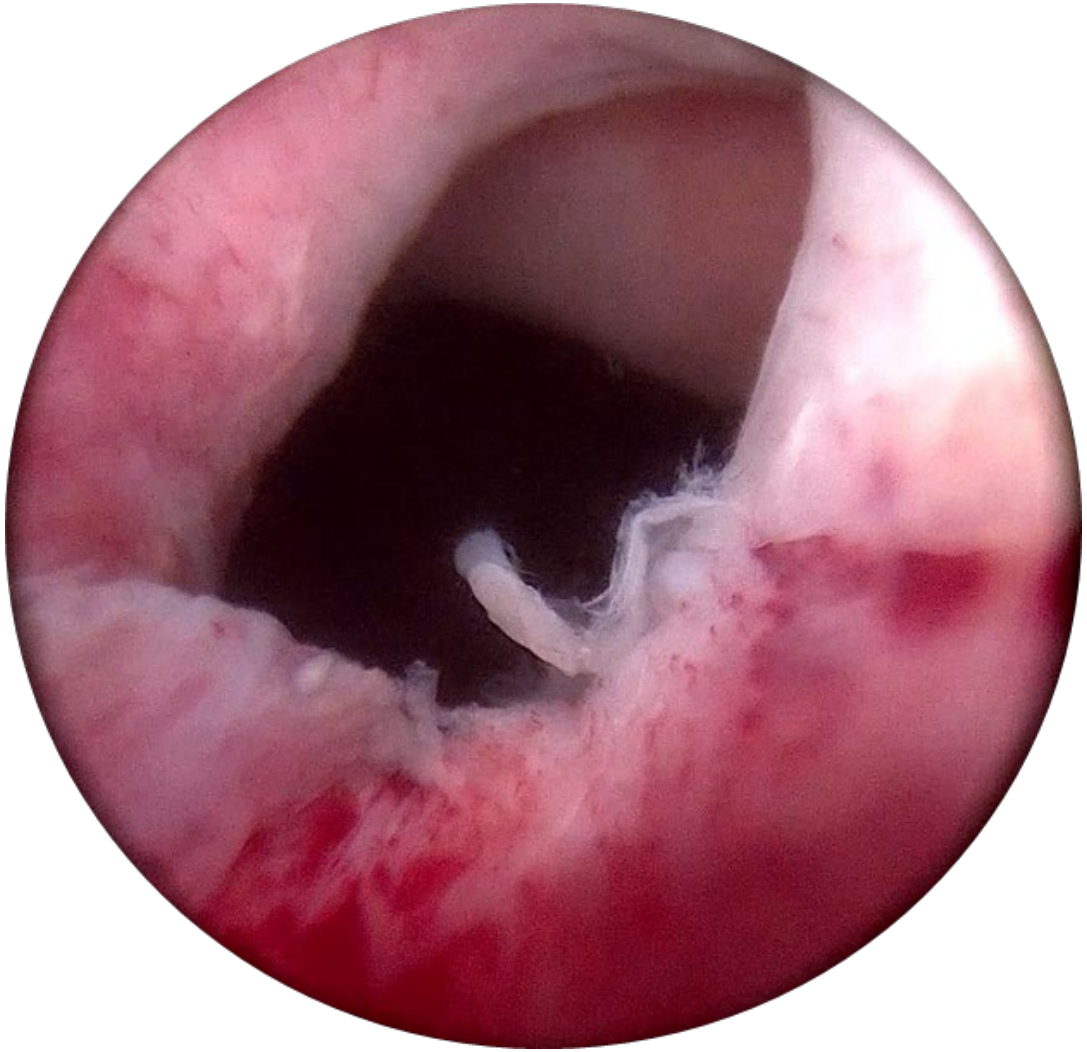
2a. Pathologies in post fistula closure urethral incontinence



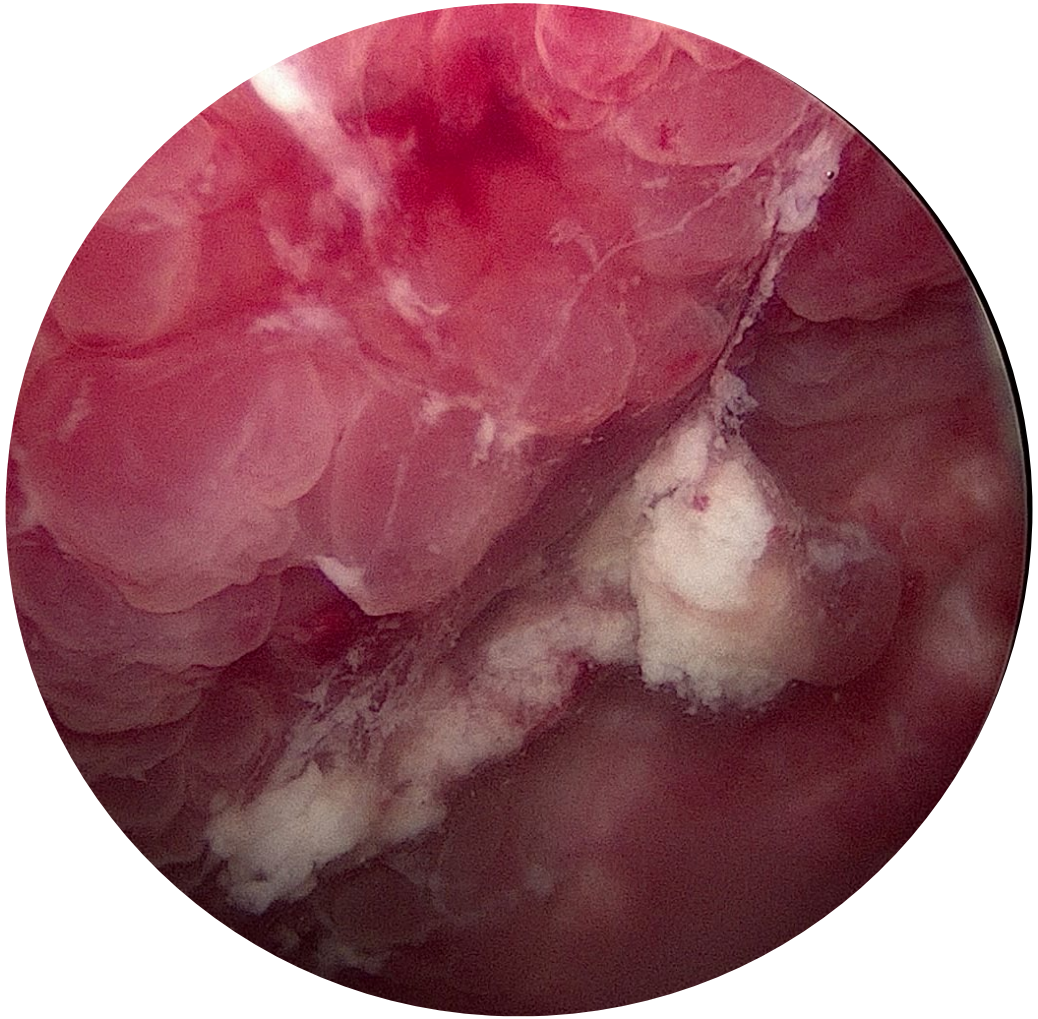


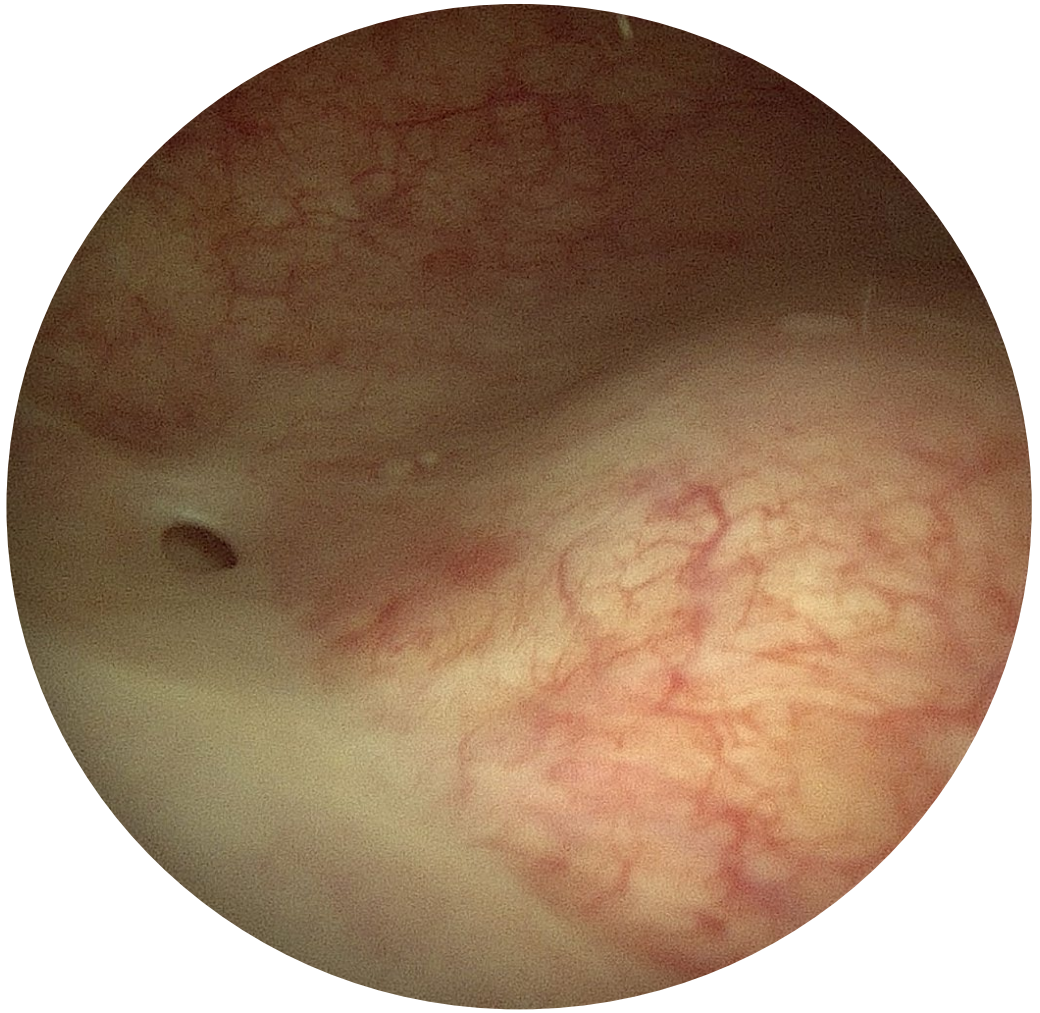
2b. Pathologies in post fistula closure urethral incontinence



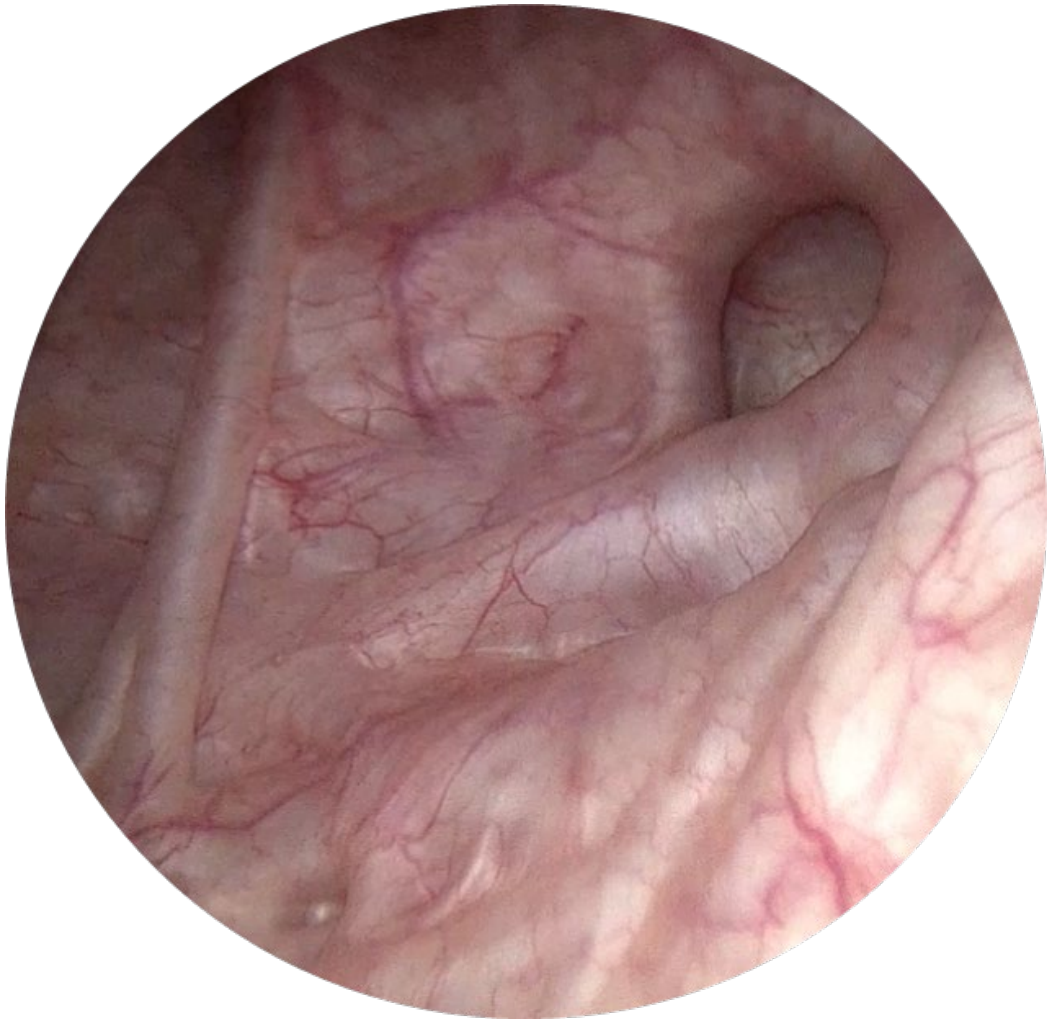


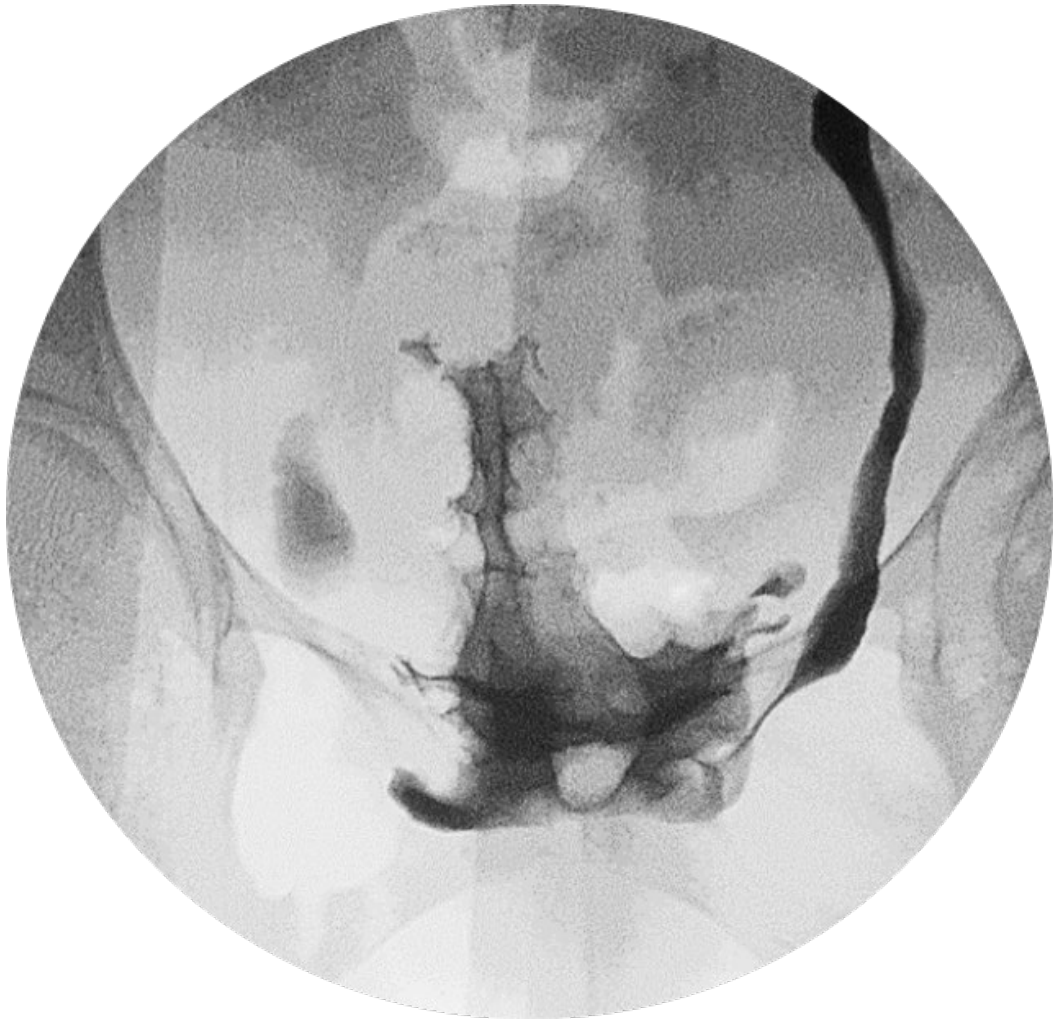
2c. Pathologies in post fistula closure urethral incontinence



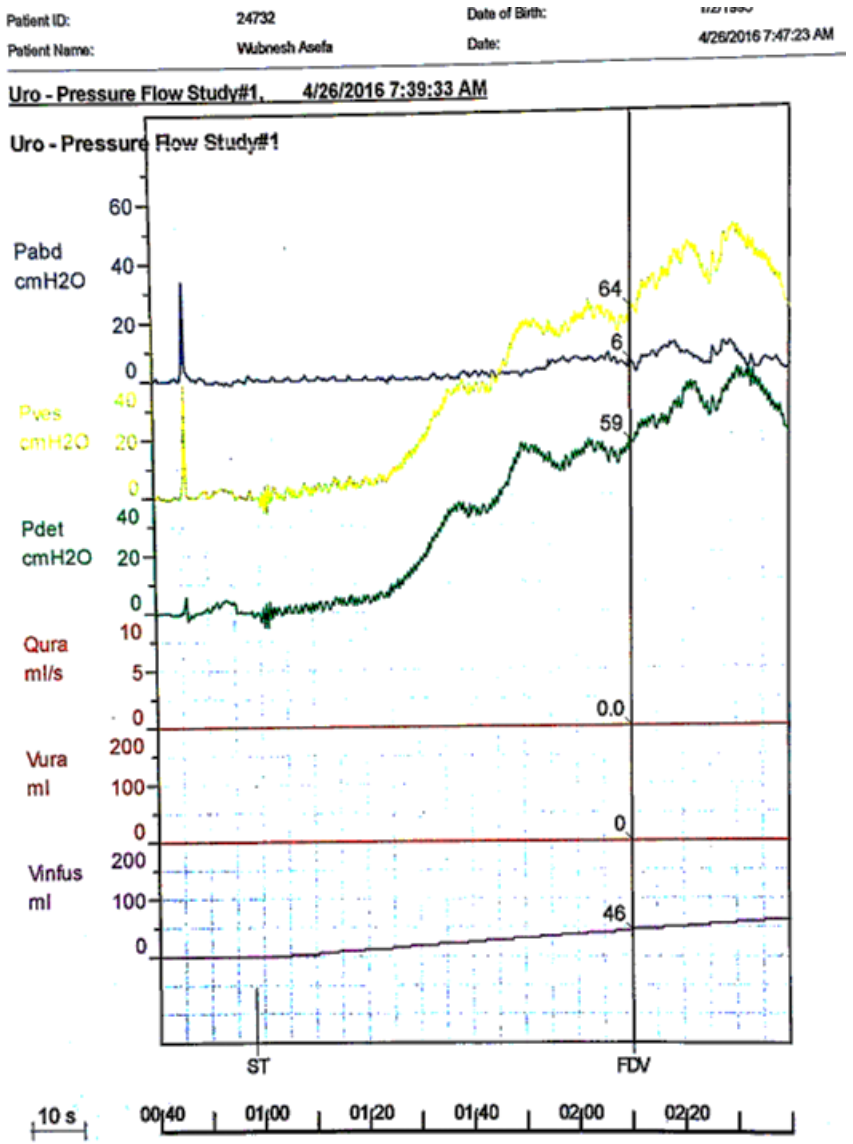


2d. Pathologies in post fistula closure urethral incontinence





2d. Pathologies in post fistula closure urethral incontinence



3. Midurethral and Pubovaginal slings

- Pubovaginal sling – tissue to support urethra (mid or neck) and abdominal wall fixation point, traditionally on to the pubis symphysis or pectineal ligament
- MUS – tension free placement of mesh tape between urethra & vagina
  - TVT in 1995, TOT in 2001
  - Retropubic, transobturator, adjustable/singe incision
  - Emphasis on the midurethra, replaced the urethropexies and pubovaginal slings
- Resistance board during increased abdominal wall pressure, compression
- SUI or stress-dominant MUI

4a. Preoperative considerations (MUS for SUI)

General

1. Exclude other etiologies of UI
   - Complicated SUI – '… women who have complicated SUI may benefit from multichannel UD testing and other diagnostic tests before initiation of treatment, especially surgery …'
2. Confirm normal bladder emptying
3. Assess surgical risk

Post fistula closure UI

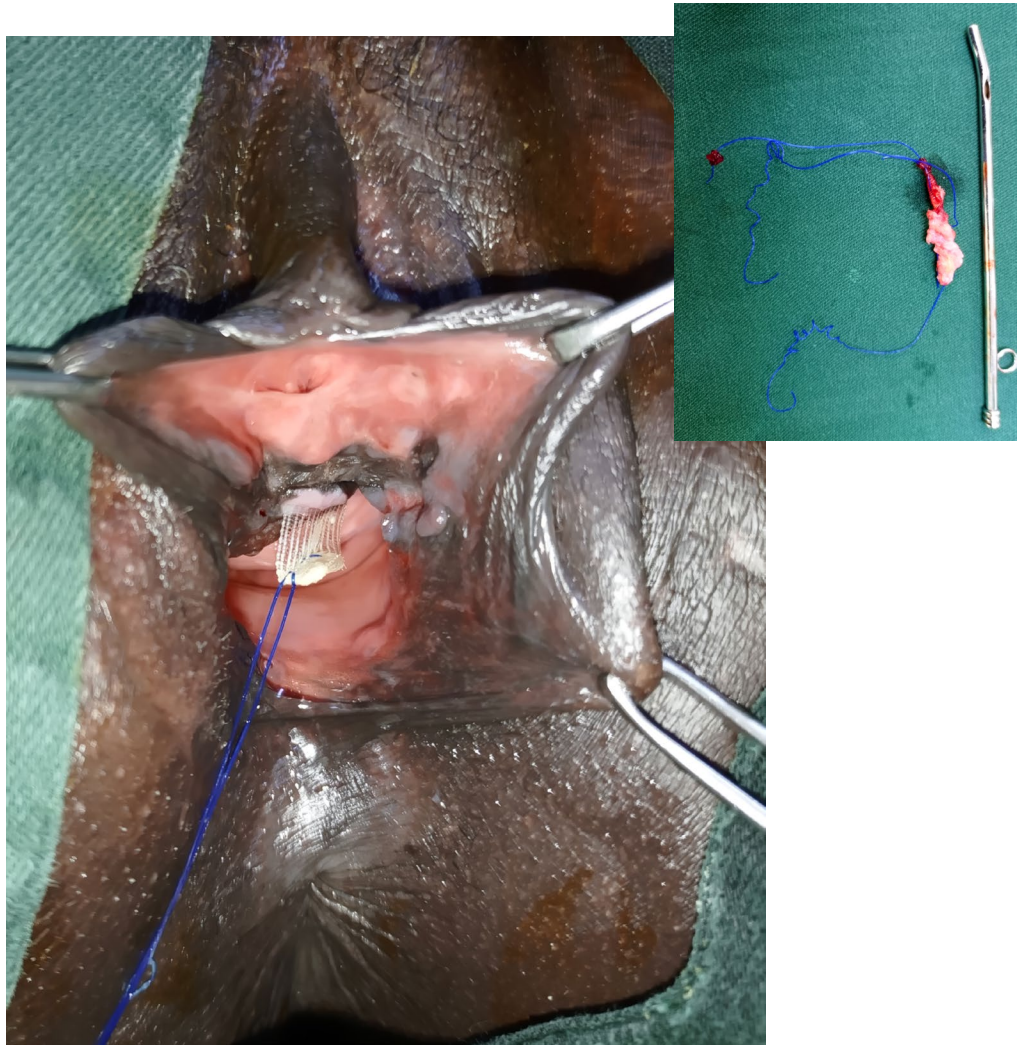
- Take time, be thorough
- History – severity, sensation, diary, motivation
- Examination
  - Vagina, urethral tissue, sphincter tone
  - VU/PVR, Valsalva (active attempt to hold urine), Bonney's, overactivity
  - Ultrasound
  - UDS
  - Cystoscopy

Basic Evaluation Findings for Uncomplicated Versus Complicated SUI

Evaluation	Findings	
	Uncomplicated	**Complicated**
History*	Urinary incontinence associated with involuntary loss of urine on effort, physical exertion, sneezing, or coughing	Symptoms of urgency, incomplete emptying, incontinence associated with chronic urinary retention, functional impairment, or continuous leakage
	Absence of recurrent urinary tract infection	Recurrent urinary tract infection†
	No prior extensive pelvic surgery No prior surgery for stress incontinence	Previous extensive or radical pelvic surgery (eg, radical hysterectomy)
		Prior anti-incontinence surgery or complex urethral surgery (eg, urethral diverticulectomy or urethrovaginal fistula repair)
	Absence of voiding symptoms	Presence of voiding symptoms: hesitancy, slow stream, intermittency, straining to void, spraying of urinary stream, feeling of incomplete voiding, need to immediately revoid, postmicturition leakage, position-dependent micturition, and dysuria
	Absence of medical conditions that can affect lower urinary tract function	Presence of neurologic disease, poorly controlled diabetes mellitus, or dementia
Physical examination	Absence of vaginal bulge beyond the hymen on examination Absence of urethral abnormality	Symptoms of vaginal bulge or known pelvic organ prolapse beyond the hymen confirmed by physical examination, presence of genitourinary fistula, or urethral diverticulum
Urethral mobility assessment	Presence of urethral mobility	Absence of urethral mobility
Postvoid residual urine volume	Less than 150 mL	Greater than or equal to 150 mL
Urinalysis/urine culture	Negative result for urinary tract infection or hematuria	

4b. Intraoperative considerations

- Regional anesthesia
  - Urinary stress test – LA, sedation
- Instruments – foley, cystoscope
- Mark abdominal exit points
- Midurethral vaginal incision
- Bladder deviation, 'slide' over pubis
- Cystourethroscopy (up to 40% missed)
- Tension free placement, ? Obstruct



5. Multidisciplinary approach

- Cure vs expectation of outcome
- Patient reported outcomes – Quality of life (QoL), multidimensional 'domains'
  - Emotional/social - relationships with family and friends, intimacy, and sexuality
  - Functional – role performance, daily activities
  - mental/psychologic – emotional distress, sense of wellbeing and health
  - Physical – symptoms, side effects of treatment
  - Additional – disease specific, health provider/team relationship
- Physical therapy

Summary

- Post fistula closure UI needs a team approach to improve patient QoL with no promise of 'complete cure'
- PVS procedures are reasonable alternative procedures for post fistula closure SUI for selected women
- PVS procedures are better offered for women with post fistula closure UI after optimal preoperative evaluation to confirm predominant SUI