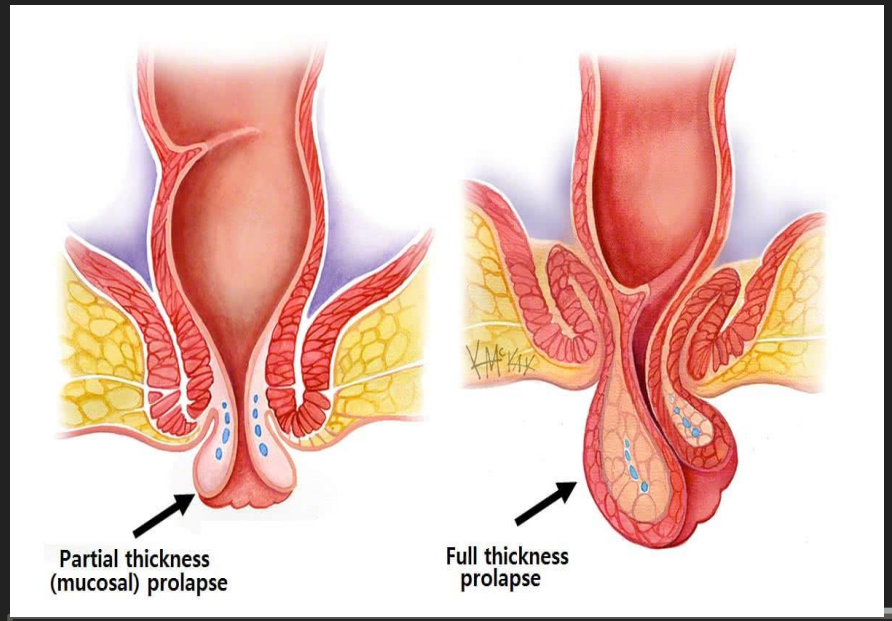

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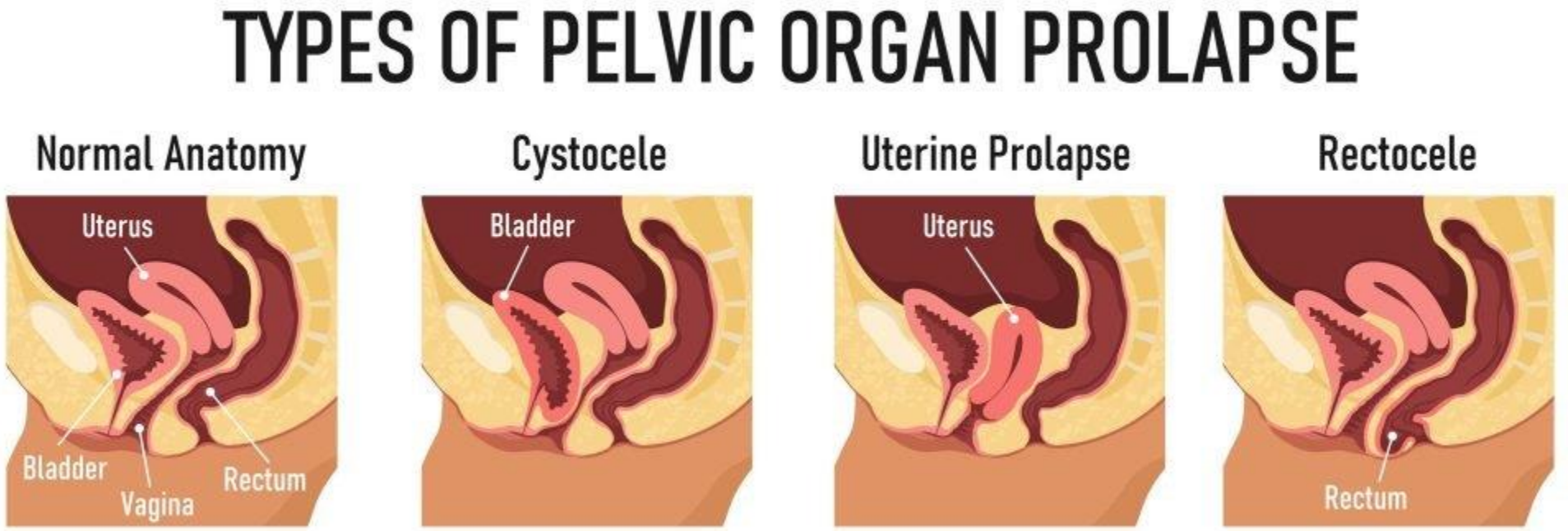
Cairo University.

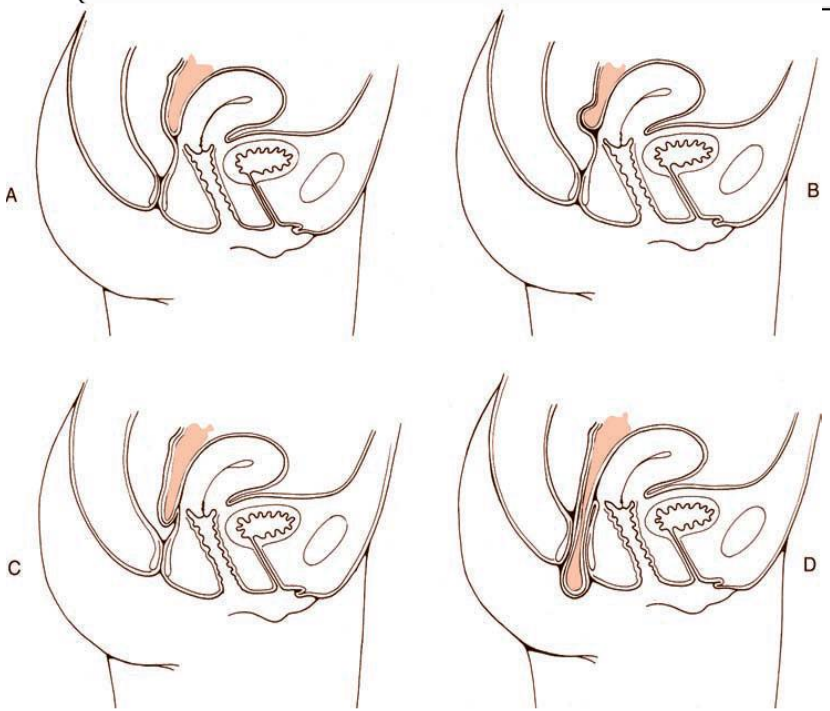
MANAGEMENT OF MULTI-COMPARTMENT PELVIC PROLAPSE

Introduction and scope of the problem

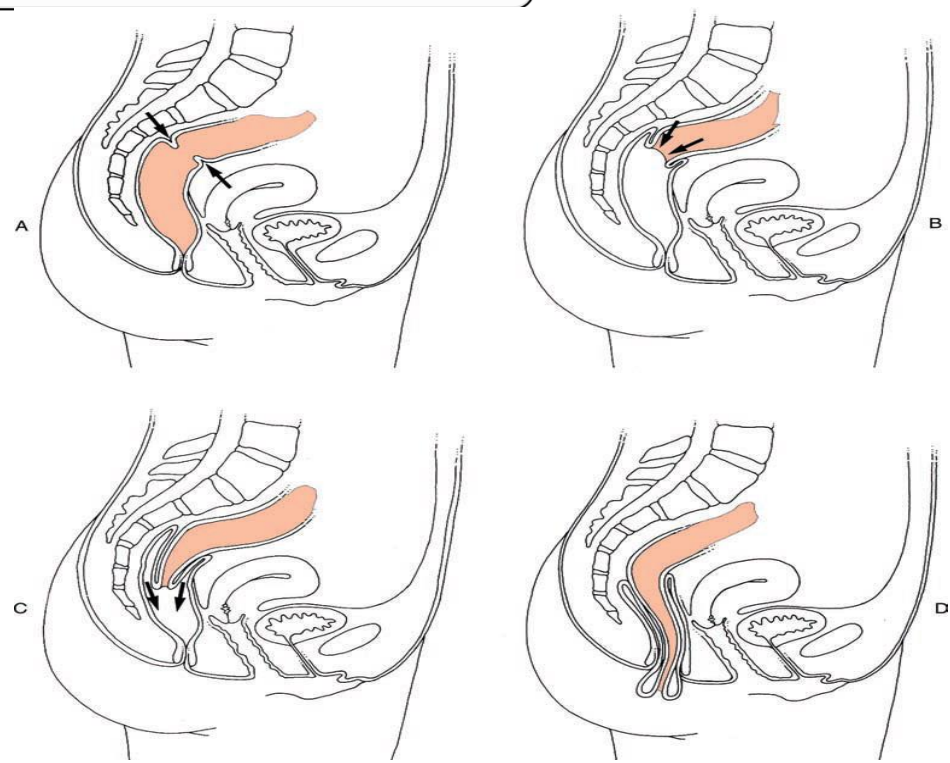


Theories for Pelvic organ prolapse

Sliding hernia theory by Moschowitz through a defect in the pelvic fascia



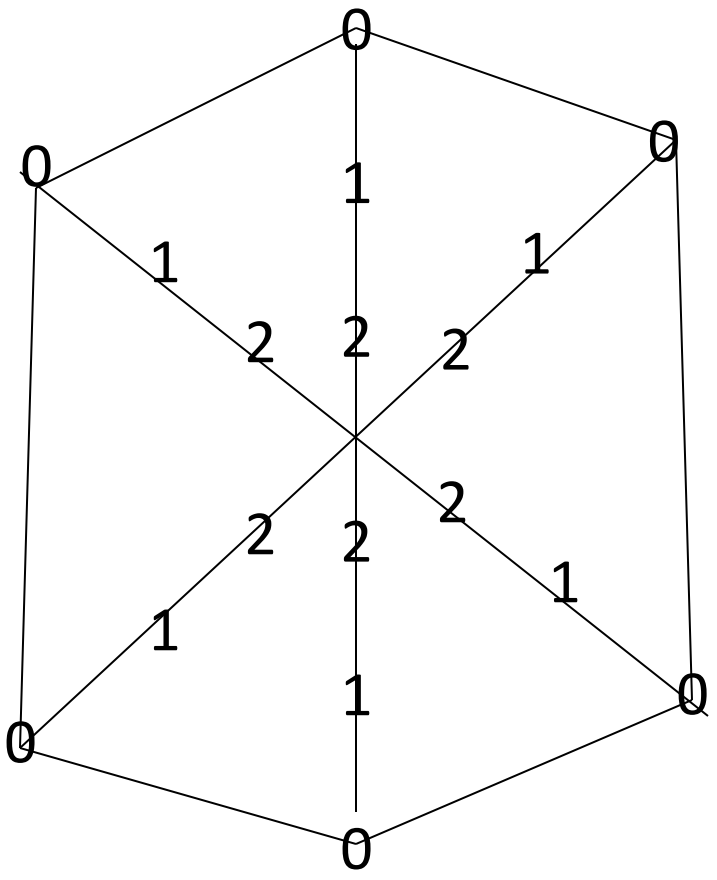
Intussusception theory by Broden and Snellman involves **circumferential intussusception of the rectum or the organ prolpasing**



Gynecologic.
Sexual Dysfunction.

Constipation

Dysuria



Urinary incontinence

Anal incontinence

Prolapse

TAPE Perineologic Concept Jaquet Beco 2000 www.Prineology com

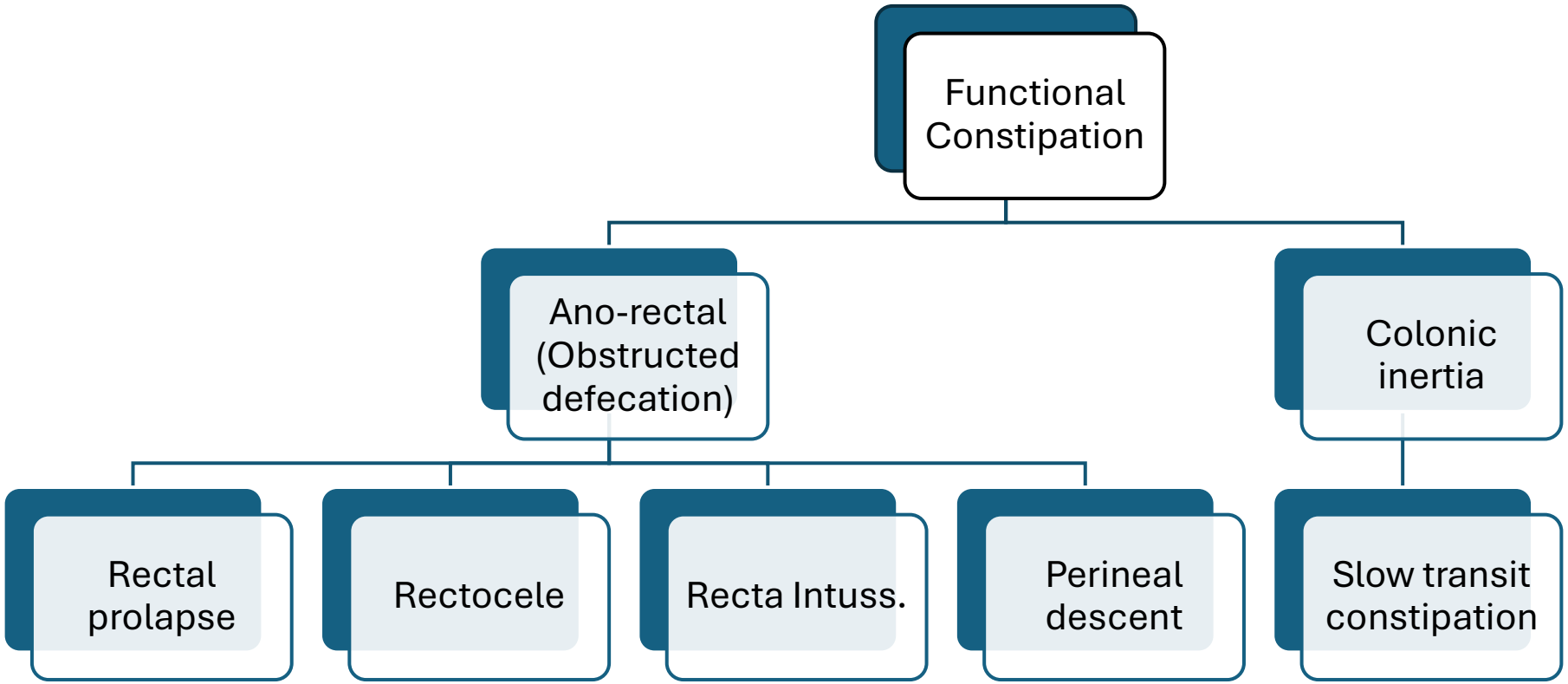
Constipation

➢ **Primary versus secondary constipation**

Patient with symptoms of impaired evacuation must be evaluated for 2ry causes for constipation such as :

- **Mechanical causes** e.g. Rectal or colon cancer
- **Endocrine or metabolic disorders** e.g. Hypothyroidism, diabetes, hypercalcemia
- **Neurologic diseases** e.g. Multiple sclerosis, parkinson's disease
- **Medications** e.g. Opiates, analgesics, antidepressants
- **History of sexual abuse** should be considered in women with anismus

Introduction and scope of the problem



Khaikin M, Wexner SD. Treatment strategies in obstructed defecation and fecal incontinence. World J Gastroenterol 2006; 12(20): 3168-317

Main symptoms of ODS

- Difficulty to defecate although having urge.
- Sense of incomplete evacuation.
- Hard stool.
- Patient may help him/herself by digitation or perineal support.

Vaginal Symptoms

- Dyspareunia
- Vaginal bleeding
- A sense of fullness in the vagina

Urinary symptoms

. Includes panel of symptoms such as urgency, frequency of micturition, dysyria and stress urinary incontinence.

Clinical assessment and treatment

- This include:
  1. History taking.
  2. Physical examination.
  3. Investigations
  4. The nonsurgical options
  5. Surgical techniques (abdominal, perineal)

(Madhulika Varma, Janice Rafferty,W. Donald Buie, Practice Parameters for the Management of Rectal Prolapse Dis Colon Rectum 2011; 54: 1339–1346)

(

- Patients usually present with a general complaint of constipation and have previously tried a plethora of over-the-counter medications to relieve their symptoms, which may be combined with urinary +/- vaginal and uterine symptoms.
- Patients frequently resort to laxatives, suppositories, or enemas to relieve symptoms with only limited improvement.

- How to approach a case of constipation??

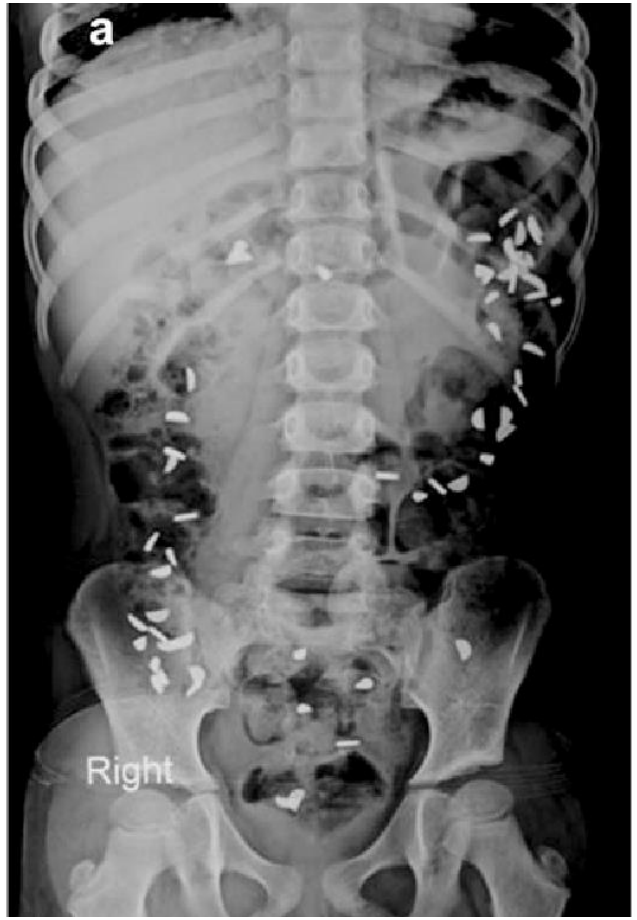
Physicians need to have an organized approach to manage those patients optimally.

We need first to exclude secondary constipation due to other causes discussed before.

- Then, you should **exclude** mechanical causes of prolonged constipation especially if the patient meets criteria of cancer screening and this is mainly by **Flexible Sigmoidoscopy or Colonscopy.**

- After that **exclude** Slow transient constipation mainly by **Colonic transient time study.** This is needed if the patient complains of no urge or feeling to defecate and is not complaining of the classic ODS symptoms.

- So **proper history taking** is crucial to start management and requesting proper investigations and excluding unnecessary ones.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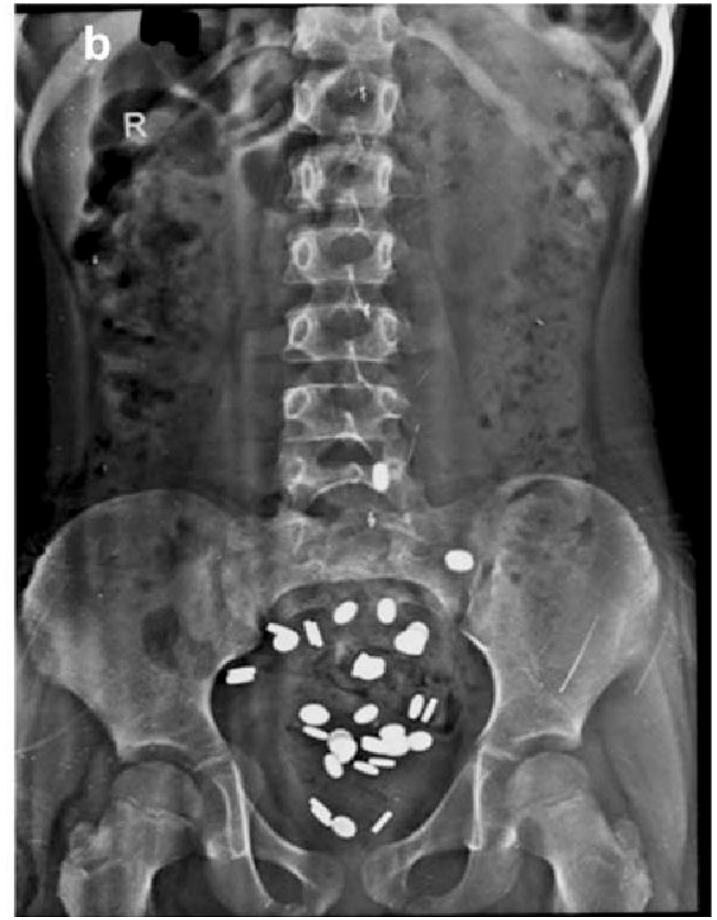
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- In ODS, clinical history & examination → mainstay of diagnosis
- To be combined with physiological tests (ano-rectal manometry) and imaging techniques ***(Dynamic MRI, Defecography and Endoanal U/S)***
- Evacuation disorders are caused by morphologic & functional abnormalities → **dynamic** imaging techniques

Conventional defecography

- **Pros & Cons**

✓Minimally invasive

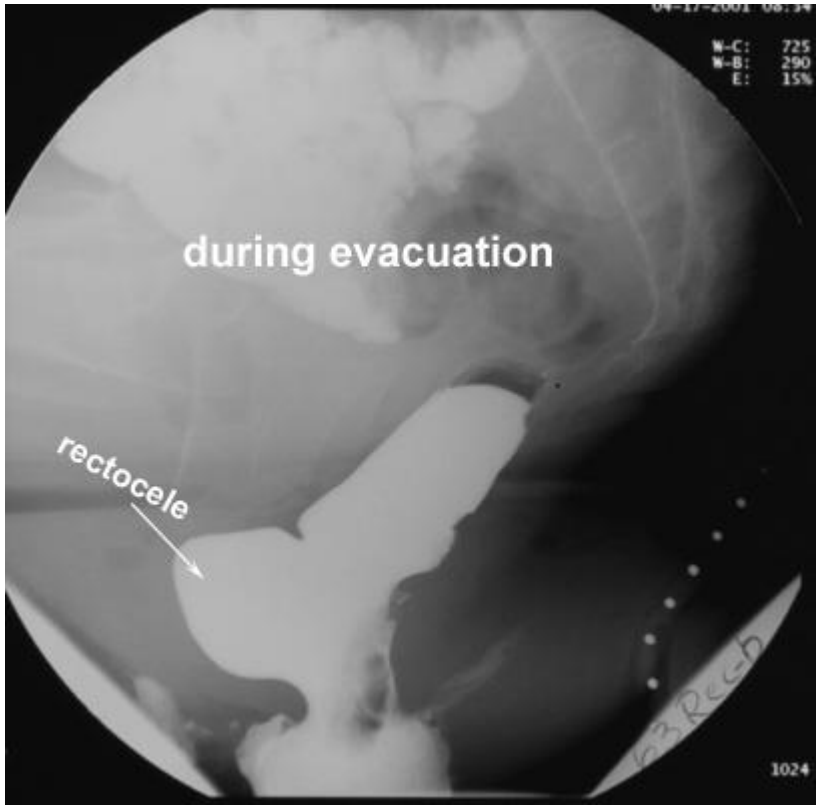
✓Technically simple

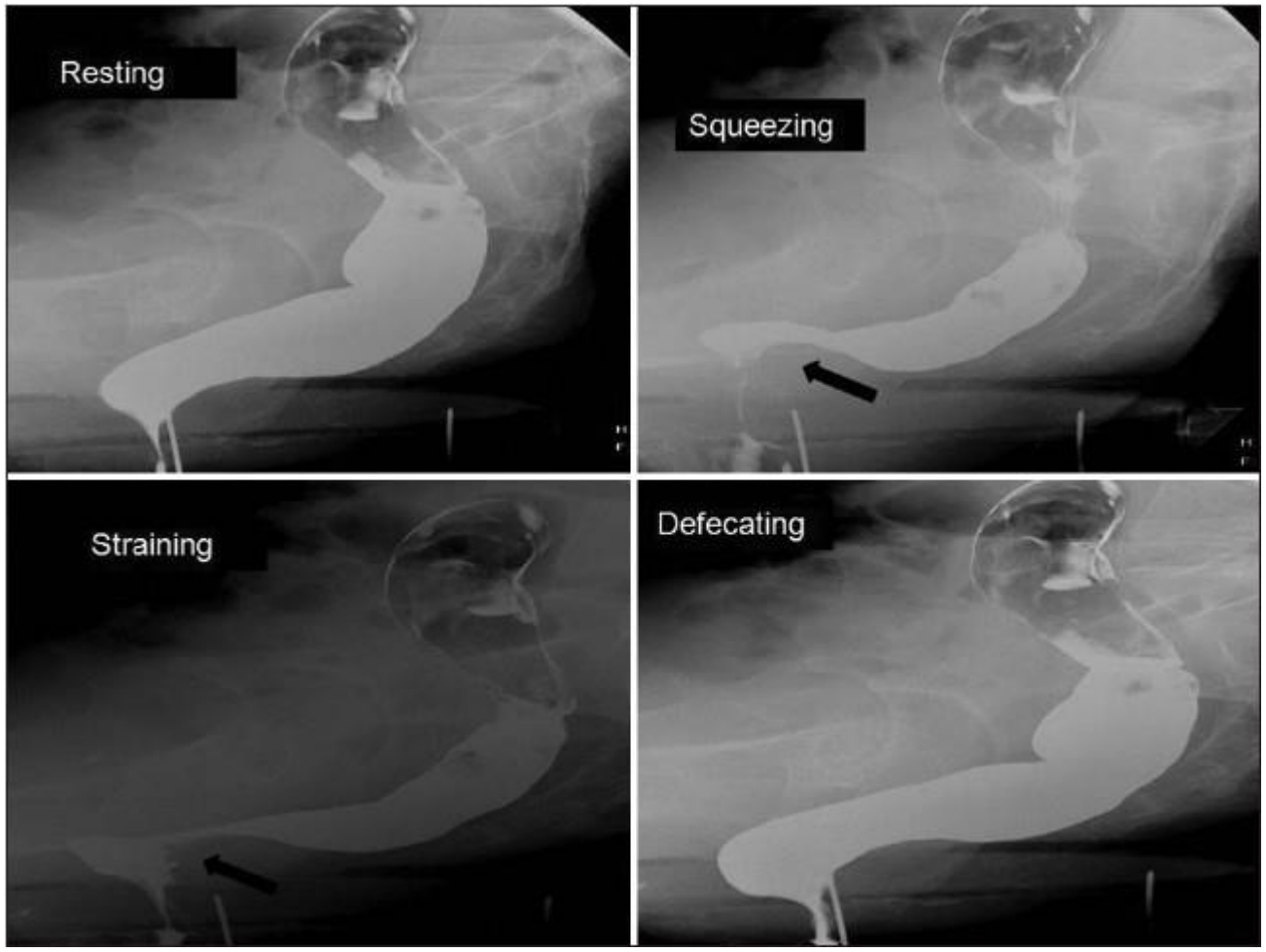
✓Also, **the patient position** during the study is nearly the normal defecating position.

✖ Radiation exposure

✖ Specific radiology environment

✖Limited ability to detect anterior and middle compartment's abnormalities so it can be used only if the main complaint is **ODS**


during evacuation
rectocele
W-C: 725
W-B: 290
E: 15%
1024


Resting
Squeezing
Straining
Defecating

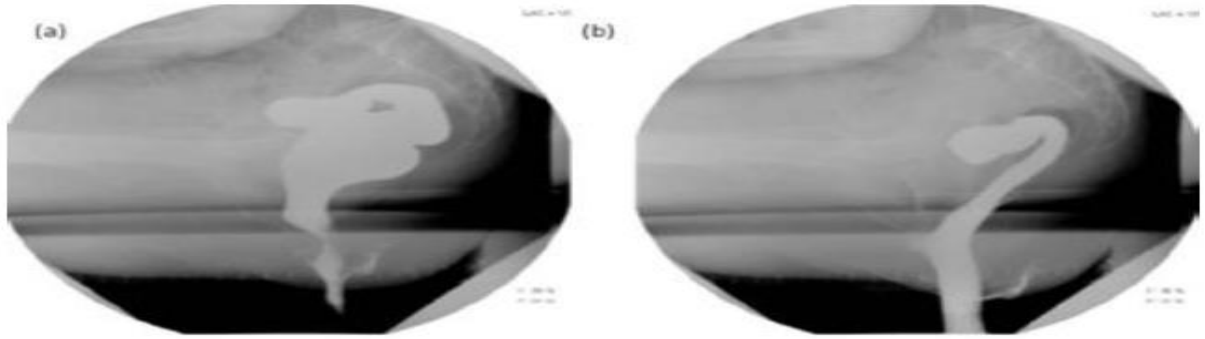
Dynamic MRI:

Investigation of choice in multiple organ prolapse

- Open or closed-configuration unit.
- Open system is more physiological but not widely available.
- Avoids exposure to harmful ionizing radiation.
- Allows excellent visualization of surrounding soft tissues and support structures of pelvic organs
- The use of MRI is restricted by
  - Availability
  - Cost
  - **Supine position** (less suitable for identifying abnormalities)

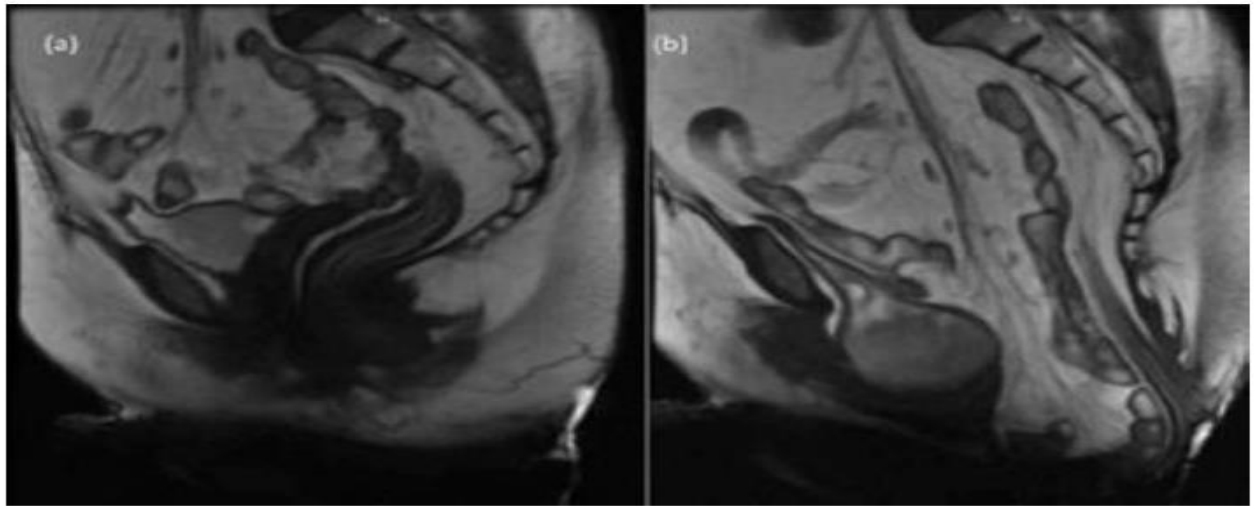
Imaging

- **Defecography**



(a) demonstrates defecography of a patient with rectal prolapse in the resting state. (b) Straining clearly shows the absence of mesorectal to sacral fixation.

- **MRI defecography**



Dynamic MRI in a female with suspected multiple pelvic organ prolapse. The resting image (a) is in bold contrast to the straining image (b) which shows a prominent pelvic floor descent, cystocele and enterocele in combination with a clinically obvious full-thickness rectal prolapse.


Defecography
MRI Defecography
Anorectal manometry
Colonic transit time
Colonoscopy
Investigations

Management of Pelvic organ prolapse

- An initial conservative approach has been encouraged: high-fiber diet, biofeedback, and rehabilitation of the pelvic floor muscles can help to reduce symptoms of outlet obstruction and also may improve another organ prolapse symptoms.

Surgical treatment of rectal prolapse

Perineal procedures

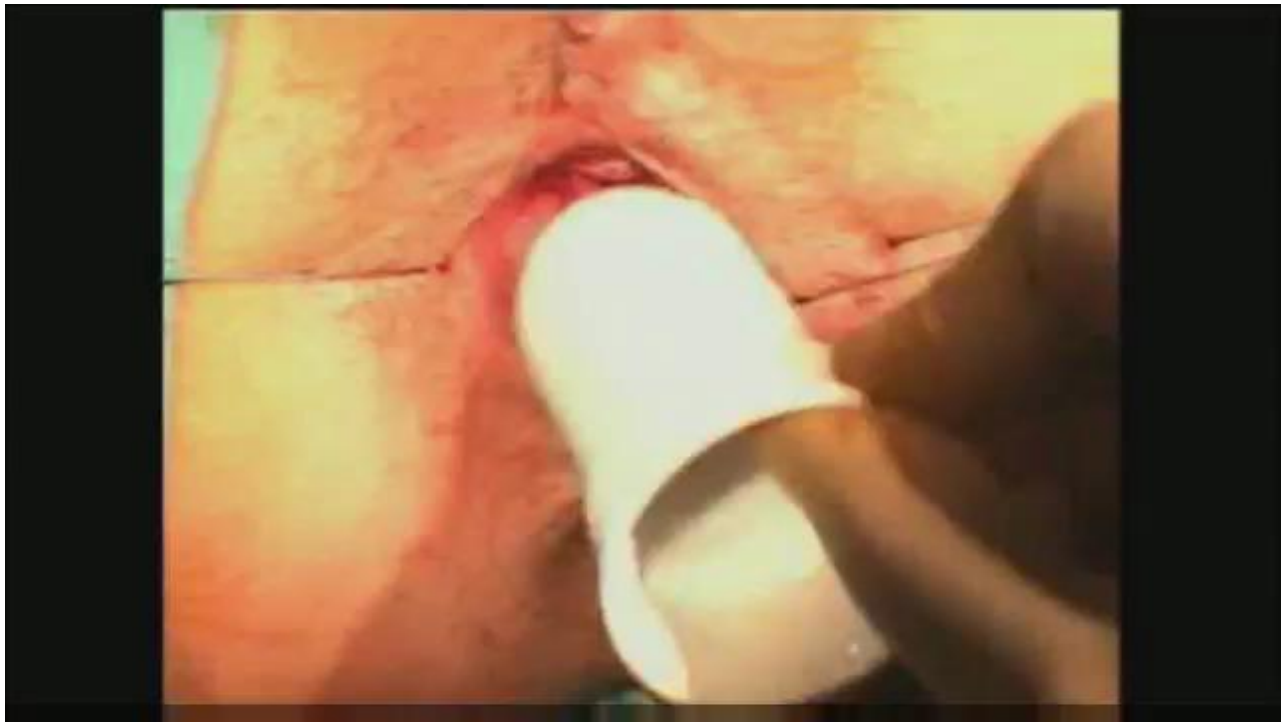
- Perineal Rectosigmoidectomy (Altemeier's procedure)
- Delorme Procedure (Rectal mucosa striping + rectal muscle plication)
- Anal encirclement (Thiersch procedure) has high failure rate.
- Other procedures includes: Perineal Proctectomy, Posterior Rectopexy, and Levator Ani Muscle Repair and posterior colporrhaphy.
- Stapled transanal rectal resection (STARR)

Abdominal procedures

- Suture Rectopexy
- Ripstein procedure (anterior sling rectopexy).
- Laparoscopic ventral mesh rectopexy.
- Robotic Rectopexy.
- Laparoscopic Protack rectopexy.
- Laparoscopic Resection Rectopexy
- Pelvic organ prolapses suspension (POPS) surgery

STARR (Stapled Trans Anal Rectal Resection)

Video



•.

•. 2015

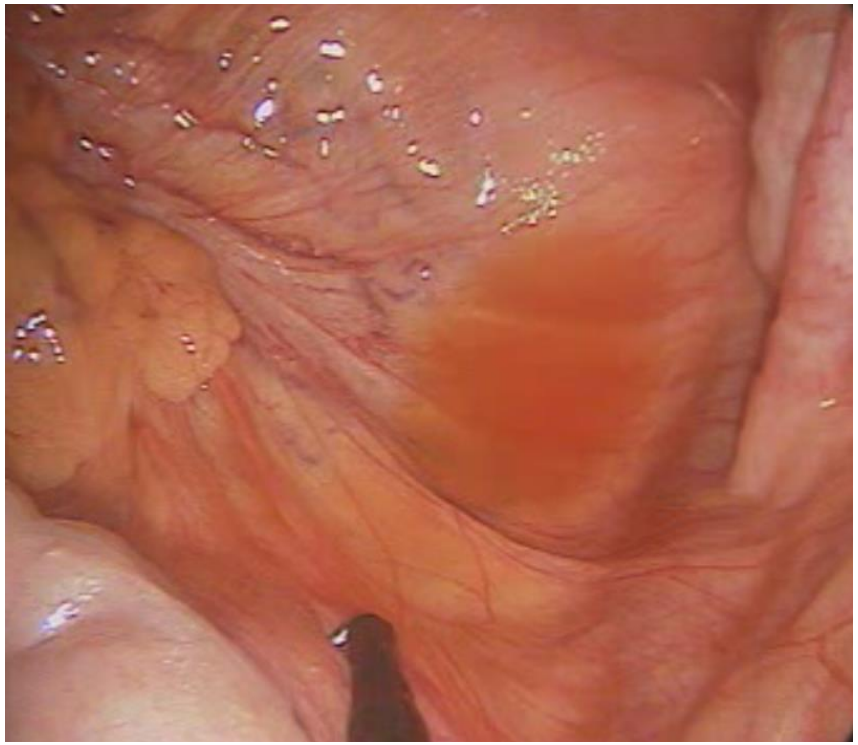
- Laparoscopic VMR is the current gold standard for treatment of rectal prolapse in Europe.

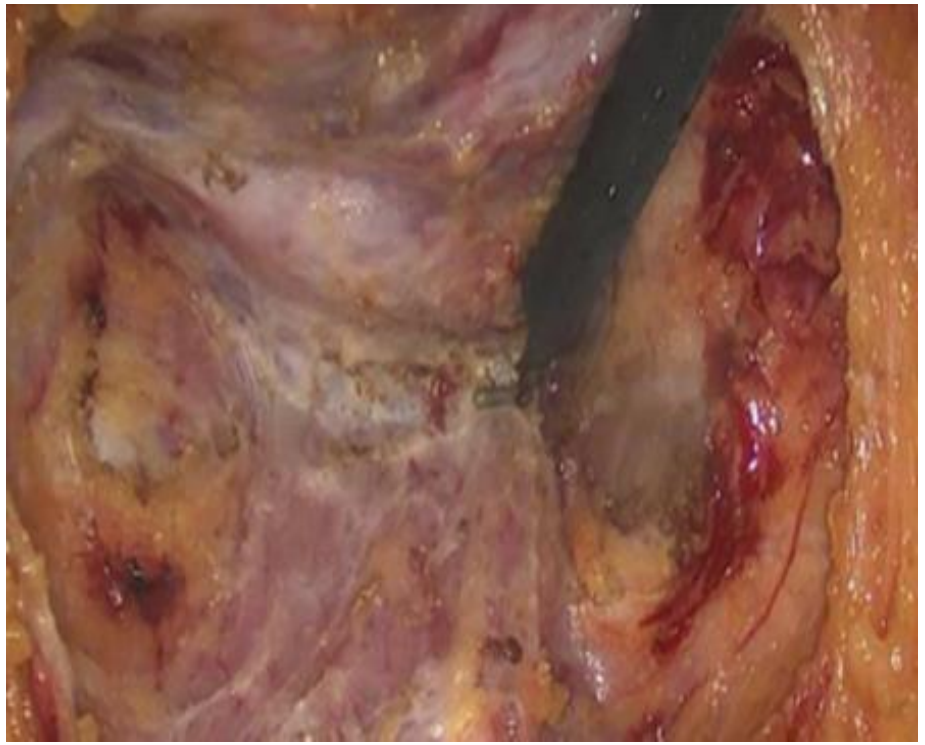
- It is associated with functional improvement, low morbidity, and low recurrence rates but has a high learning curve for proficiency and advanced training may be required. Also, it may cause sexual complication such as retrograde ejaculation in males. (Esther C J Consten et al, Annals of surgery 2015)

- Usually does not improve other organs prolapse symptoms.

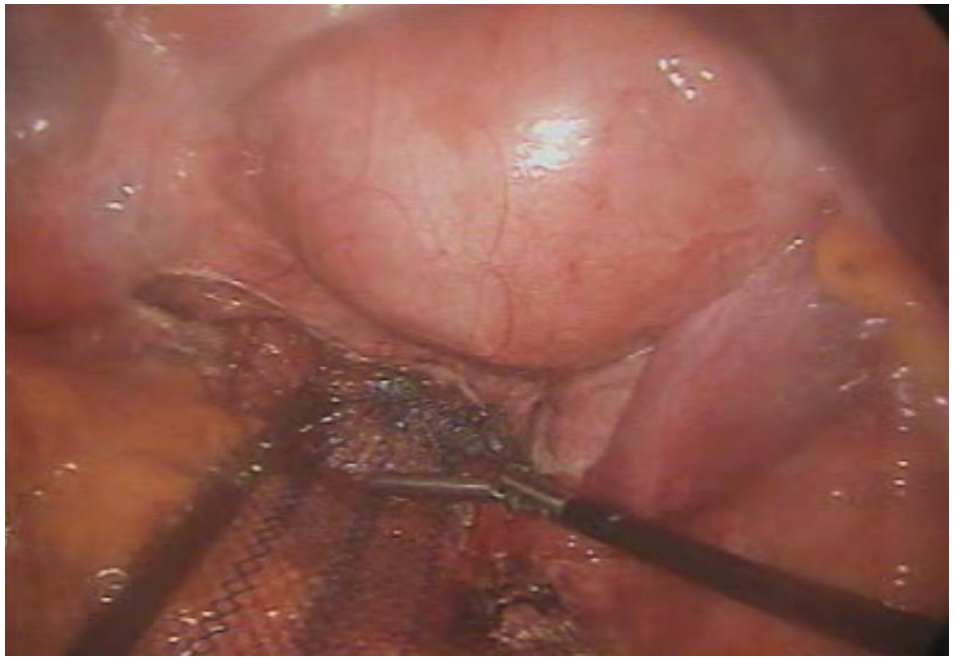
- Although Laparoscopic VMR is a safe operation. Mesh erosion rates are 2% and occasionally require resectional surgery. For this reason, the use of biological mesh is gaining popularity (Charles Evans et al, Dis colon rectum, 2015)

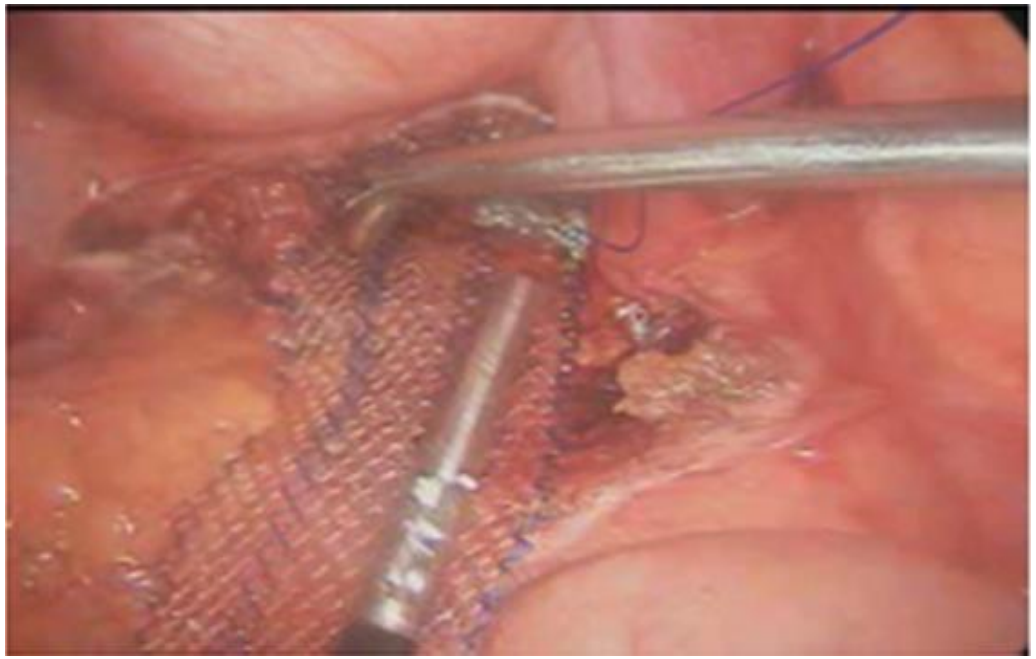
Laparoscopic Ventral mesh rectopexy



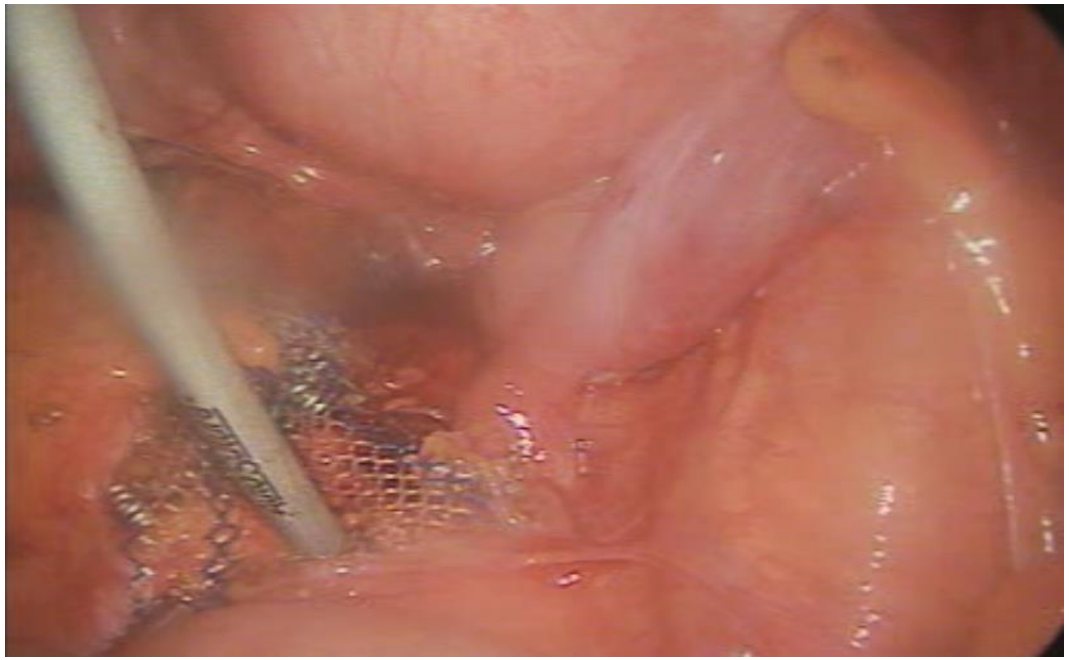


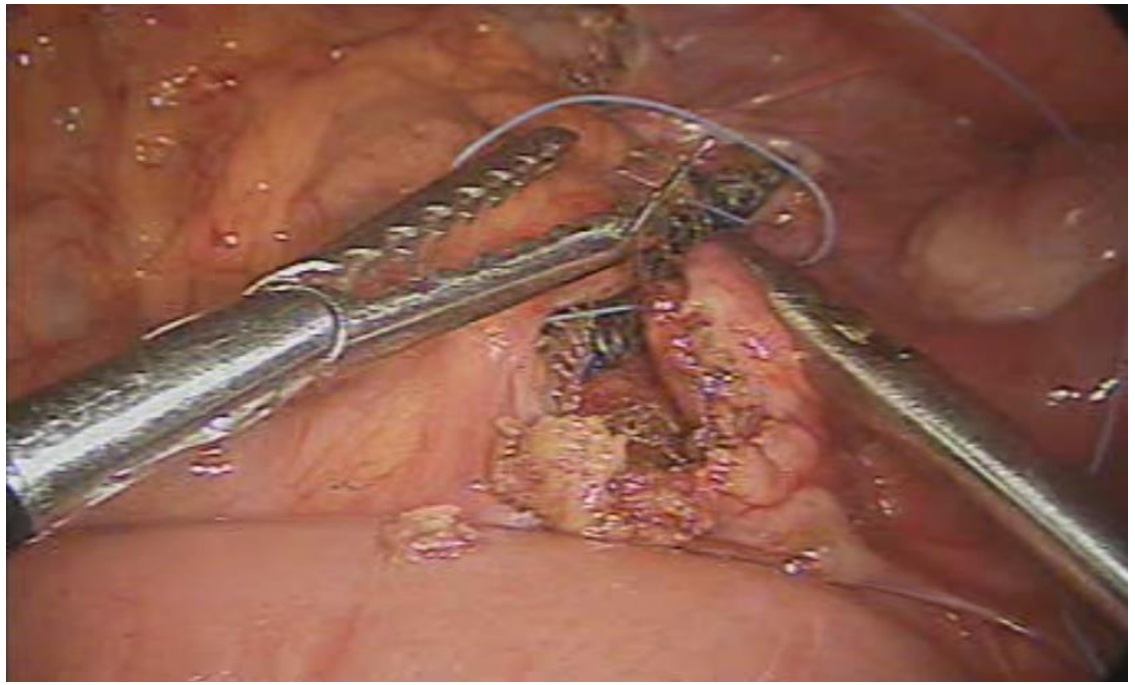
Laparoscopic Ventral mesh rectopexy





Laparoscopic Ventral mesh rectopexy



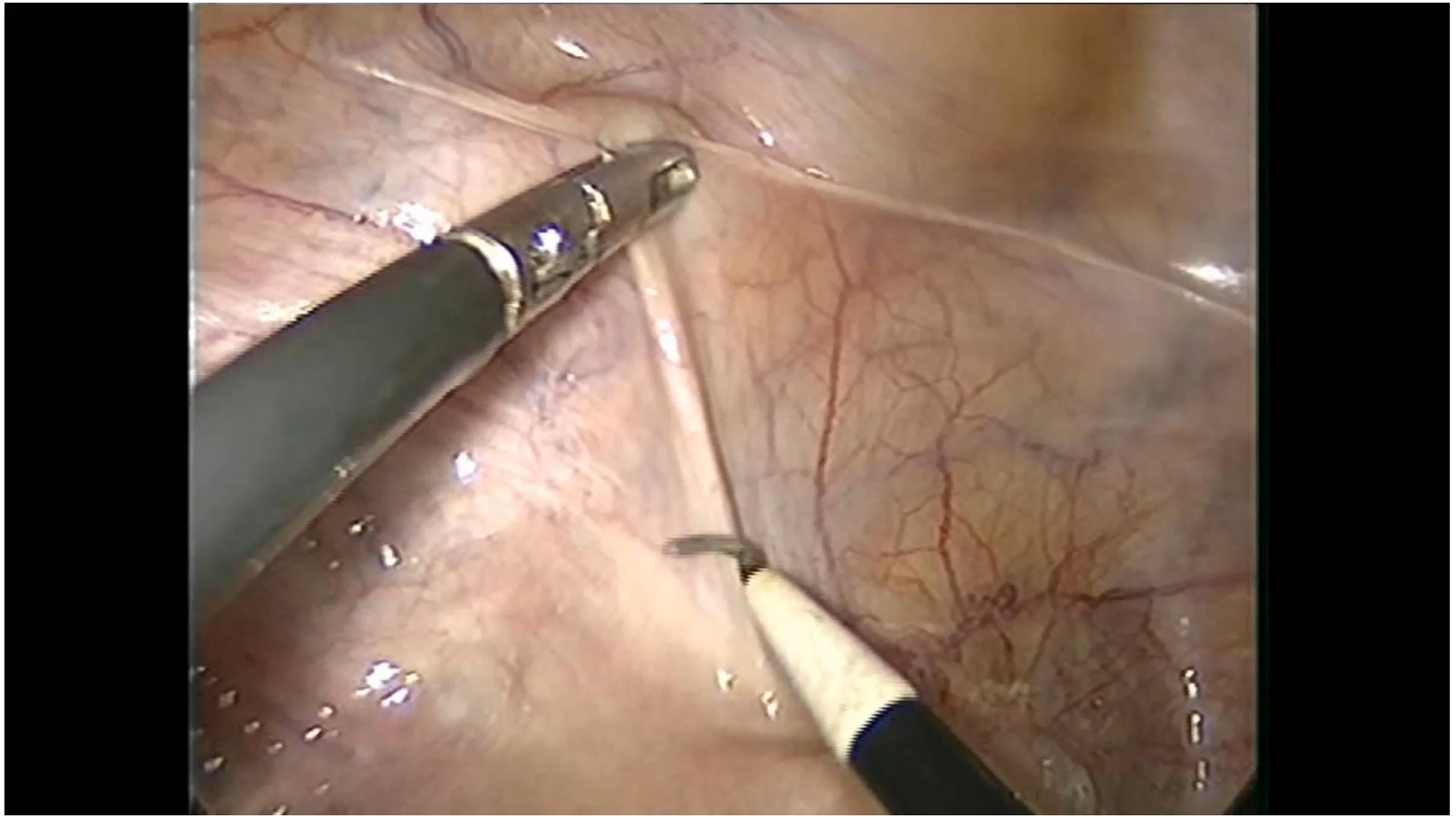


Pelvic organ prolapse suspension surgery (POPS)

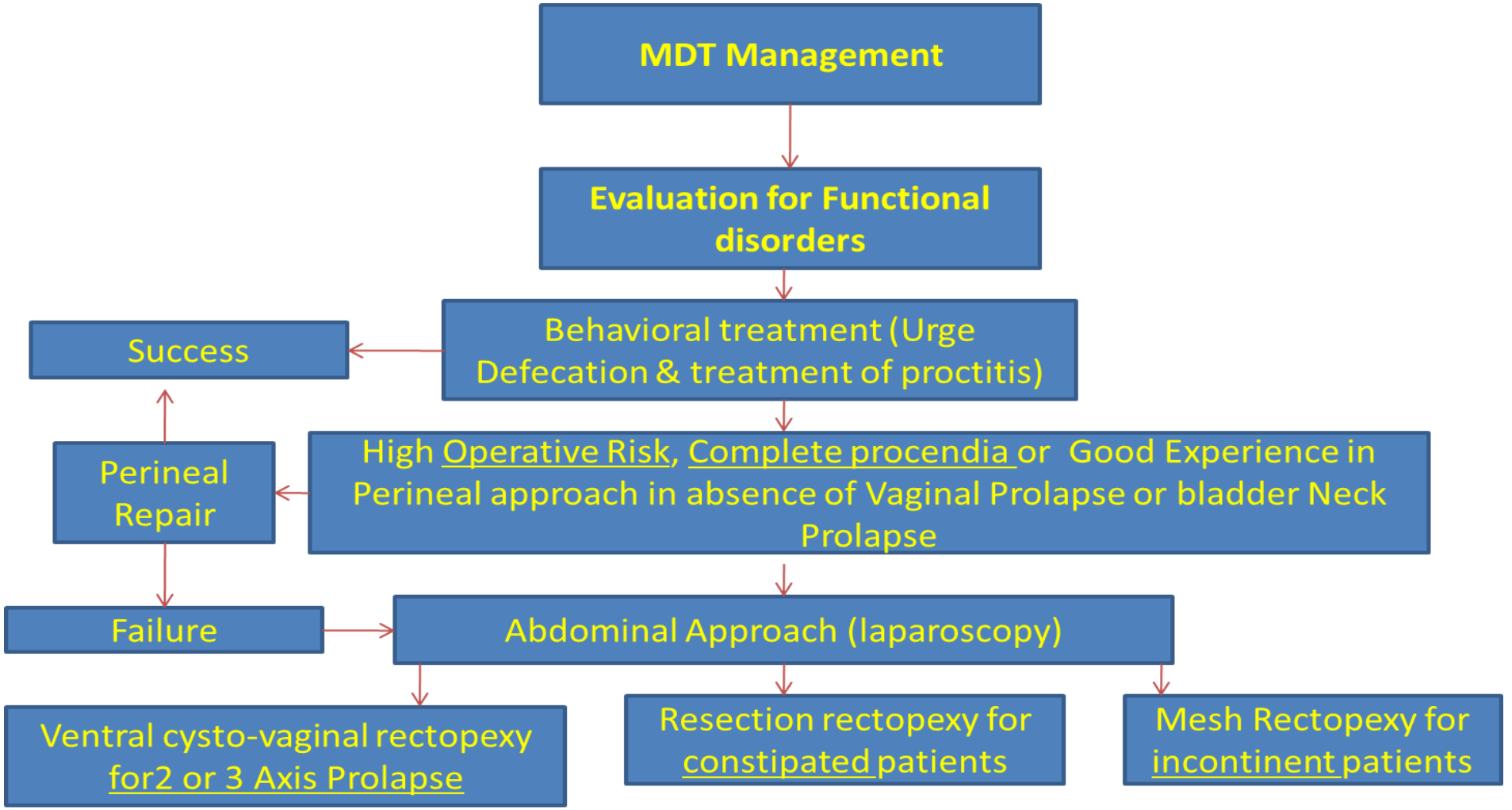
- Is a recent surgical procedure for one-stage treatment of multiorgan female pelvic prolapse. The technique is simpler than traditional treatments with an important reduction or completely disappearance of the pre-operative symptomatology (F. Ceci et al., 2013).

- **The original procedure should be combined with STARR for any residual rectal prolapse.**

- **It is considered a good combined technique to deal with all symptoms of pelvic organ prolapse.**



Pelvic organ Prolapse (Evaluating the many Choices)



Conclusion and take-home messages.

- There are multiple procedures and approaches for surgical treatment of pelvic organ prolapse, and the choice between them is regulated by multiple factors.

- The management should be tailored to each patient according to demographic features, general condition, co-morbidties and lastly clinical presentation.

Thank you

Questions?