

## **RECTAL PROLAPSE – 3 PROCIDENTIA**

### Anatomical features of pelvic floor:

- Full thickness vs. mucosal prolapse
- Levator ani (pubococcygeus, puborectalis, iliococcygeus) – longitudinal fibers of rectum interweave with levator fibers, fixating rectum to pelvic floor – provides rectal stability
- Puborectalis maintains angulation of anorectal junction, tilting rectum anteriorly towards pubis. Lengthens during defecation, allowing more vertical position of rectum for emptying

### Predisposing factors:

- Female gender
- Children and older adults
- Nulliparity
- Redundant rectosigmoid
- Deep pouch of Douglas
- Constipation
- Neurologic (Psychiatric) disease
- Pelvic floor defect and weak internal sphincter (may be secondary to prolapse)
- Lack of fixation of rectum to sacrum
- Prior surgery
- Intussusception

### Clinical features and evaluation:

- 75% patients report protrusion with defecation, sometimes with lifting/coughing
- Differential of physical findings include prolapsed hemorrhoids (rectal prolapse presents as a concentric ring of tissue, hemorrhoids as folds with spaces in between), prolapsing rectal polyp, prolapsing rectal mucosa
- Incontinence and constipation are associated
- Association of uterine prolapse and cystocele
- Internal prolapse – tenesmus, incomplete emptying
- Infrequently, incarceration can occur
- Work up includes initial physical exam, endoscopy to rule out point of intussusception, defecography, manometry, pudendal nerve terminal motor latency (PNTML)
  - Initial exam should include observation of straining on toilet, evaluation of tone and contractility of sphincter mechanism (poor preoperative tone suggests poor results postoperatively)
  - Similarly, pudendal neuropathy associated with worse postoperative results
  - Cinedefecography - effective method of demonstrating prolapse
    - Intussusception and increased distance between rectum and sacrum seen
    - Abnormal anorectal angle ( normal 90° at rest, 110° during straining)
    - Nonrelaxing puborectalis
    - Abnormal perineal descent

### Non-surgical treatment

- Adhesive strapping
- Manual anal support during defecation
- Correct constipation
- Sclerosing agents

### Surgical treatment

- Incarceration – inject local to relax sphincters and reduce, or put sugar on mucosa
- Many operations described for rectal prolapse
- Basic components:
  - Narrowing of anal canal
  - Obliteration of pouch of Douglas
  - Resection of bowel
  - Restoration of pelvic floor
  - Suspension of rectum to sacrum
- Thiersch repair and its modifications – out of favor, older patients, tightening of anus at level of anal verge using synthetic material (wire originally described). Risk of wound infection, incarceration in setting of recurrence
- Moschcowitz (obliteration of pouch of Douglas) – theory of prolapse as a sliding hernia – purse string sutures placed around pouch of Douglas to close it – 50% recurrence
- Restoration of pelvic floor – placcation of levator muscles anterior/posterior to rectum
- Bowel resection – anterior resection +/- rectopexy to sacral promontory – involves removal of redundant sigmoid, mobilization of rectum to lateral stalks and use of stalks to pexy rectum to sacrum. 7-9% recurrence
- Ripstein procedure – sling of Teflon, Marlex, Gortes – mobilization of rectum to levators, retraction of rectum cephalad and attachment of sling to sacrum and rectal wall. Complications include hemorrhage and infection
- Perineal resection – Altemeier and Delorme procedures – complex
- Abdomino-perineal approach
- Trans-sacral approach
- Laparoscopic approaches

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