Functional Consequences After Anorectal surgery

Mohamed Mahmoud Raslan

Professor of colorectal surgery cairo university

Why to Focus on Function?

- Beyond Technical Success: A healed wound does not equal a happy patient.
- Quality of Life (QoL): Bowel function is intimately linked to psychosocial well-being, daily activities, and overall QoL.
- Patient-Reported Outcomes (PROs): These are now the gold standard for evaluating success in coloproctology.
- Medicolegal Importance: Inadequate consent and management of expectations are common sources of litigation.

Main functional cosequences

- **Incontinence**
- **Constipation**
- **Pain**
- **Urogenital**

Common Anorectal Procedures & Associated Risks

- **Hemorrhoidectomy**

Pain, incontinence (minor, transient), urinary retention,ODS

- **Sphincterotomy**

Incontinence (flatus, liquid stool), pain recurrence

- **Fistulotomy**

Incontinence (degree depends on fistula complexity/sphincter involvement)

- **STARR /LVMR Rectopexy**

Constipation, urgency, pain, sexual dysfunction

Constipation

An operation for constipation that causes more constipation

Mechanisms

- **Pain-induced avoidance**

Fear of painful defecation leads to stool withholding.

- **Opioid use**

Post-operative analgesics slow colonic transit.

- **Anatomical**

Procedures for prolapse (e.g., rectopexy) can sometimes worsen constipation fixation of atonic rectum

- **Pelvic floor dyssynergia**

Post-operative guarding and failure to relax from pain ,hard stools and excessive straining

Management of Constipation

- **Prevention**

Proper diagnosis piles is not only a disease it may be a symptom for another disease

- **First-Line**
- Multimodal postoperative analgesia (minimize opioids, use multimodal analgesia: NSAIDs, acetaminophen, topical lidocaine).
- Stool softeners & bulking agents: Docusate, psyllium (start pre-op or immediately post-op).
- Osmotic laxatives: PEG 3350, Lactulose.
- Patient education: Encourage early mobilization and adequate hydration.
- **Second-Line:**
- Stimulant laxatives (Senna, Bisacodyl) short-term.
- **Refractory Cases: Rule out pelvic floor dyssynergia**

Incontinence

Mechanisms

- **Direct sphincter injury**

Iatrogenic damage during fistula or fissure surgery.

- **Stretch injury**

From retractors or drainage of large abscesses ,huge longstanding external rectal prolapse hidden incontinence due to severe rectal atony

- **Altered rectal compliance**

After resection procedures.

- **Disturbed sensory function**

Loss of the anal cushion "seal" after hemorrhoidectomy.

- **overflow incontinence**.

Management of Incontinence

- **Assessment**
- History, physical exam, endoanal ultrasound (gold standard for sphincter defects), anorectal manometry.
- **Conservative**
- Dietary modification (fiber regulation).
- Antidiarrheals (Loperamide) for firming stool.
- Pelvic Floor Rehabilitation (Biofeedback): First-line therapy, improves strength and sensory awareness.
- **Advanced**
- Sacral Nerve Stimulation (SNS), injectable bulking agents, sphincteroplasty (for defined defects).

Pain

An operation to treat pain that causes more pain

Types

- **Acute Surgical Pain**

Expected, peaks at 48-72 hours, should be manageable.

- **Chronic Pain**

(>3 months) a serious complication.

Causes of chronic post operative pain

Surgical

- Anal stenosis
- Persistent pathology ,Residual or recurrent hemorrhoids skin tags
- Non-healing wound after excisional procedures.
- Abscess / Fistula formation – unrecognized sepsis causing ongoing pain.
- Staple line complications.
- Foreign body granuloma

- **Neuropathic**

- Injury to sensory nerves (inferior rectal nerve, pudendal nerve branches) during surgery.

- Neuroma formation at the wound site.

- Pudendal neuralgia – compression or entrapment (rare but reported).

- Chronic pelvic pain syndrome triggered by nerve hypersensitivity.

- **Functional**

- Sphincter spasm – most common cause of chronic post-hemorrhoidectomy pain, due to internal sphincter hypertonia.

- Levator ani syndrome

pelvic floor spasm – pain worse on sitting.

- Dyssynergic defecation

leading to straining, trauma, and pain persistence.

Management of Pain

- **Acute Pain**

Multimodal analgesia. Avoid morphine (causes sphincter spasm). Consider topical nitroglycerin/diltiazem for sphincter relaxation. Sitz baths.

- **Chronic Pain:**
- Rule out organic : Stenosis, recurrence.
- Multidisciplinary Pain Management: Neurologist, pain specialist.
- Exclude and diagnose functional

Urogenital Dysfunction

- **Urinary Retention**
- Most common urological issue.
- Causes: Pelvic pain/spasm, spinal anesthesia, excessive IV fluids, opioid use.
- Prevention: Limit perioperative fluids, encourage early ambulation, minimize opioids, prompt analgesia.

- **Sexual**
- **Erectile Dysfunction / Retrograde Ejaculation**

Damage to autonomic nerves (hypogastric plexus) during posterior dissection (e.g., for rectal prolapse, cancer).

- **Dyspareunia**

Often related to posterior scar tissue.

The Golden Rules: Prevention & Counseling

Meticulous Patient Selection: Not everyone with hemorrhoids needs a hemorrhoidectomy. Optimize medical management first.

Detailed Informed Consent: Have an explicit conversation about the specific risks of the planned procedure. Use patient information leaflets.

Pre-operative Optimization: Address constipation before surgery.

Technical Precision: Tailor the operation to the patient's anatomy; respect sphincter complexes.

Multimodal Analgesia Protocol: Have a standard plan to minimize opioids.

The Multidisciplinary Team (MDT)

- Successful management often requires more than a surgeon

IT NEEDS A TEAM

- Colorectal Surgeon
- Gastroenterologist / Motility Specialist
- Pelvic Floor Physiotherapist
- Pain Specialist
- Dietitian
- Clinical Psychologist / Sex Therapist

- Functional outcomes are the true measure of success in anorectal surgery.
- Constipation is common; prevent with laxatives and minimize opioids.
- Incontinence is feared; assess properly and leverage biofeedback.
- Pain must be actively managed to prevent chronicity.
- Urogenital issues require awareness and sensitive counseling.
- Prevention through patient selection, consent, and technical skill is paramount.
- ·DON’T TREAT ALONE a Multidisciplinary Team IS MANDATORY .

THANK YOU