Role of Surgery in Chronic Constipation and Obstructed Defecation

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INTRODUCTION TO CHRONIC CONSTIPATION AND ODS

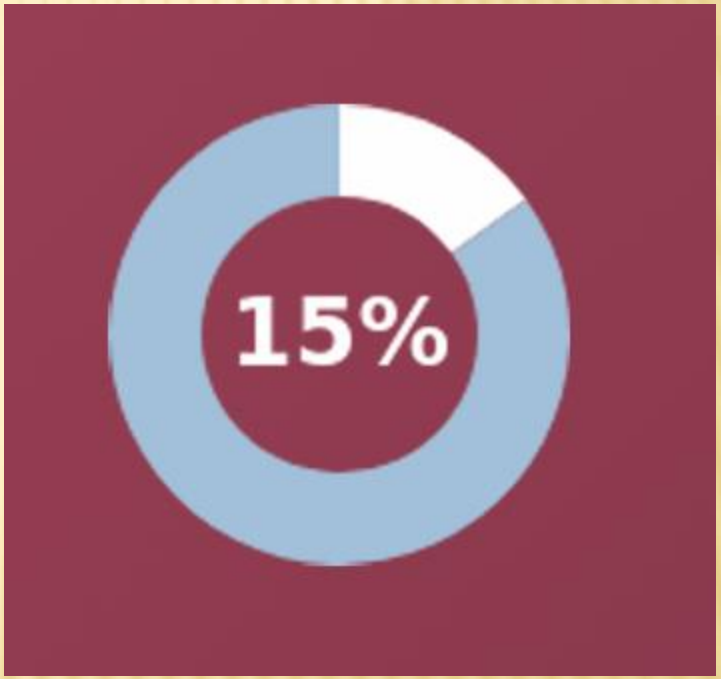
Chronic Constipation

- A common gastrointestinal disorder with worldwide prevalence
- Characterized by infrequent bowel movements and/or difficulty evacuating
- Significantly impacts patients' quality of life

INTRODUCTION TO CHRONIC CONSTIPATION AND ODS

Prevalence & Impact

- Worldwide prevalence: approximately 15%
- Significantly impacts patients' quality of life
- Can lead to social isolation and psychological issues



INTRODUCTION TO CHRONIC CONSTIPATION AND ODS

Obstructed Defecation Syndrome (ODS)

- Characterized by inability to effectively evacuate rectal contents
- Common symptoms include excessive straining and sensation of incomplete evacuation
- Often caused by anatomical defects like rectocele or internal rectal prolapse

INTRODUCTION TO CHRONIC CONSTIPATION AND ODS

Stepwise Approach to Management

1. Conservative Treatment: Dietary changes, fiber supplementation, laxatives
2. Specialized Medical Treatment: Biofeedback, specialized medications
3. Surgical Intervention: Last resort for severe, refractory cases

PATIENT SELECTION FOR SURGICAL INTERVENTION

- **Failed Conservative Management:** more than 12 months of aggressive dietary changes, fiber supplements, laxatives, and pelvic floor physical therapy
- **Specific Diagnosis:**
  - Confirmed slow-transit constipation or
  - anatomical defects causing ODS
- **Exclusion of Secondary Causes**
- **Patient Characteristics:** Severe symptoms with significant impact on quality of life
- **Psychological Assessment:** Absence of major psychological disorders

COMPREHENSIVE PREOPERATIVE EVALUATION

- **Clinical Assessment:** Detailed history and physical examination to rule out secondary causes
- **Physiological Testing:** Colonic transit study, anorectal manometry, balloon expulsion test, and defecography (MR or barium)
- **Psychological Evaluation:** Assessment for psychiatric comorbidities that may impact outcomes

MULTIDISCIPLINARY ASSESSMENT

- The decision to proceed with surgery should ideally be made by a team including:

"A multidisciplinary approach ensures all aspects of the patient's condition are addressed, maximizing the potential benefits of surgical intervention."

SURGICAL APPROACHES FOR SLOW-TRANSIT CONSTIPATION

- Total Abdominal Colectomy with Ileorectal Anastomosis
- TAC-IRA is the standard surgical treatment for patients with intractable slow-transit constipation (STC), also known as colonic inertia.
- Procedure Overview:
  - Removal of the entire colon
  - Direct connection of the small intestine (ileum) to the rectum
  - Bypasses the non-functional colon segment

INDICATIONS FOR TAC-IRA

- Severe, medically refractory slow-transit constipation
- Poor response to laxatives, fiber, and dietary changes Significant impact on quality of life
- Younger patients with severe disease

LIMITATIONS

- Significant risk of small bowel obstruction
- Potential persistence of other GI symptoms
- Requires lifelong dietary restrictions

OUTCOMES OF COLECTOMY FOR CONSTIPATION

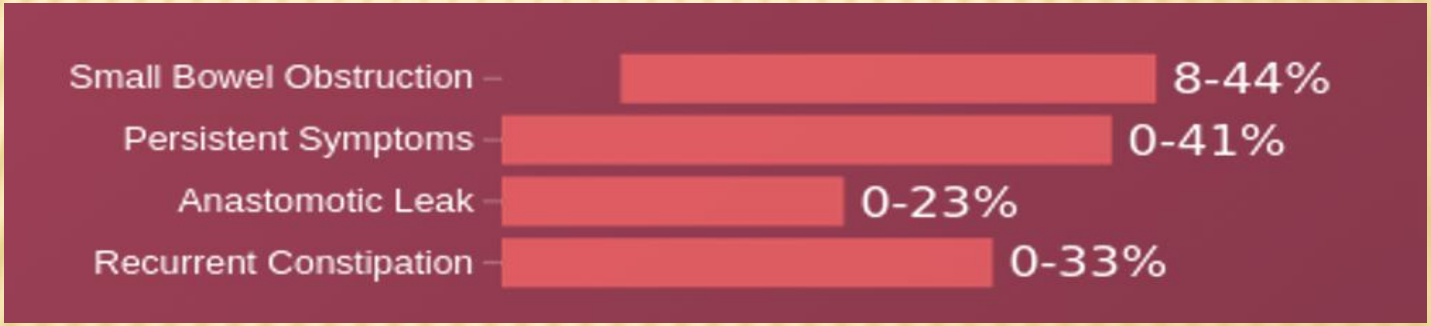
Success Rates & Outcomes

- Symptom Resolution: >90% success rate in well-selected patients
- Patient Satisfaction: Reports range from 39% to 100%
- Bowel Function: 1-3 bowel movements per day, decreasing over time

Symptoms resolution	90%
Patients satisfaction	70 %

POTENTIAL COMPLICATIONS

- **Small Bowel Obstruction**: 8% to 44% of cases
- **Persistent Symptoms**: Up to 41% may experience abdominal pain or bloating
- **Anastomotic Leak:** Stool leakage at connection site, rates up to 23%
- **Other Complications**: Wound infections, intra-abdominal abscesses, recurrent constipation (0%-33%)



Clinical Pearl: Complications are often related to patient factors and surgical technique. Careful patient selection and experienced surgical expertise can significantly reduce risk.

TRANSABDOMINAL APPROACHES FOR ODS

Laparoscopic Ventral Mesh Rectopexy (LVMR)

A minimally invasive procedure involving:

- Mobilization of the front wall of the rectum
- Attachment of synthetic mesh to secure the rectum to the sacral promontory
- Correction of prolapse and rectocele

Indications

- ODS caused by complex rectocele and internal rectal prolapse
- Patients with pre-existing weakness of the anal sphincter
- Complex pelvic floor defects

LAPAROSCOPIC VENTRAL MESH RECTOPEXY (LVMR)

Outcomes & Success Rates

- Promising functional outcomes
- Significant reduction in ODS symptoms
- Low morbidity rate
- Efficient for improving constipation symptoms

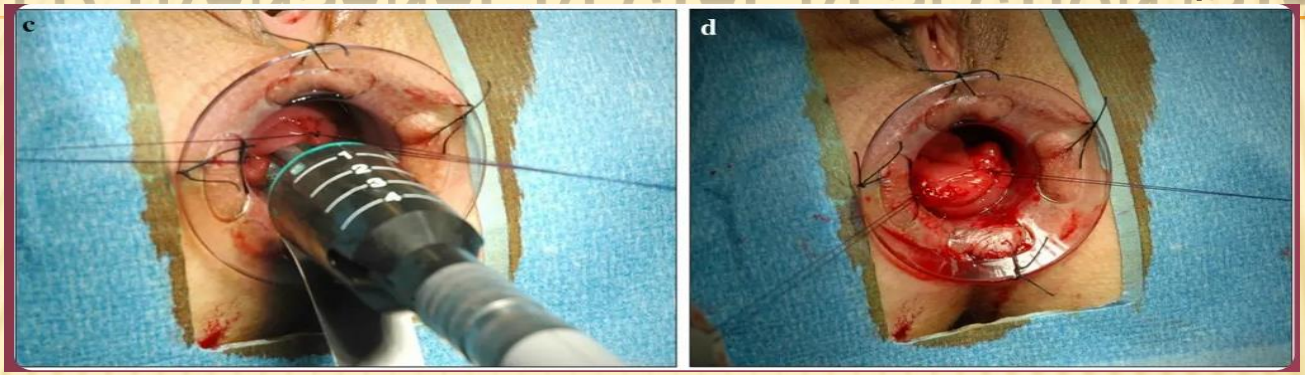
Advantages

- Preserves anal sphincter function
- Effective for complex defects

Limitations

- Considerable learning curve
- Limited long-term data
- Potential for mesh-related complications

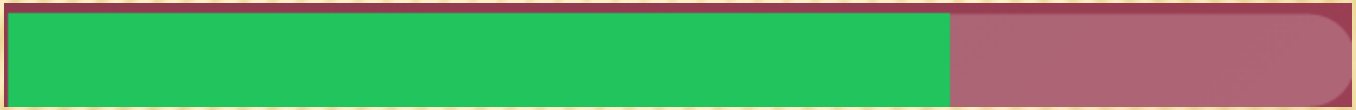
TRANSANAL PROCEDURES FOR ODS
STAPLED TRANSANAL RECTAL RESECTION (STARR)



Procedure

Uses a circular stapler to perform a full-thickness resection of the prolapsed rectal wall, correcting both rectocele and internal intussusception.

Effectiveness



60-80 %

Studies report significant improvements in ODS symptoms and high patient satisfaction rates.

Complications

Fecal urgency (may decline over time)

Recto-vaginal fistula (rare)

Rectal perforation (rare)

Recurrence rate up to 50% at 5.5 years

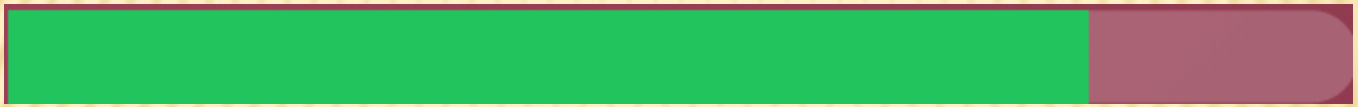
De-novo fecal incontinence (10.7%)

TRANSANAL PROCEDURES FOR ODS DELORME'S OPERATION

Procedure

Involves stripping the mucosal layer from the prolapsed segment of the rectum and then plicating (folding) the underlying muscle wall to shorten and strengthen it.

Effectiveness



74% to 94%,

Reported success rates range from 74% to 94%, with significant improvements in ODS scores and reduction in intussusception.

Advantages

- Significantly improves ODS scores
- Reduces intussusception effectively

Limitations

- More technically difficult than STARR
- Higher recurrence rate (10-30%) compared to abdominal procedures

TRANSVAGINAL REPAIR POSTERIOR COLPORRHAPHY

Technique

Incision in posterior vaginal wall to repair weakened rectovaginal septum

Indications

- Isolated rectocele
- When concomitant gynecological procedure needed

Outcomes

- Effective for Grade III rectoceles
- Significant reductions in ODS scores

Limitations

- Higher recurrence rate than other methods
- Postoperative dyspareunia (painful intercourse)

TRANSPERINEAL REPAIR
RECTOCELE REPAIR VIA PERINEAL APPROACH

Technique

Incision in perineum to access and repair the rectocele

Advantages

- Preserves vaginal integrity
- Does not stretch anal sphincters
- Lower risk to sexual function

Outcomes

- Median improvement rate of 72.7% in ODS symptoms
- Comparably efficient to LVMR for simple rectocele

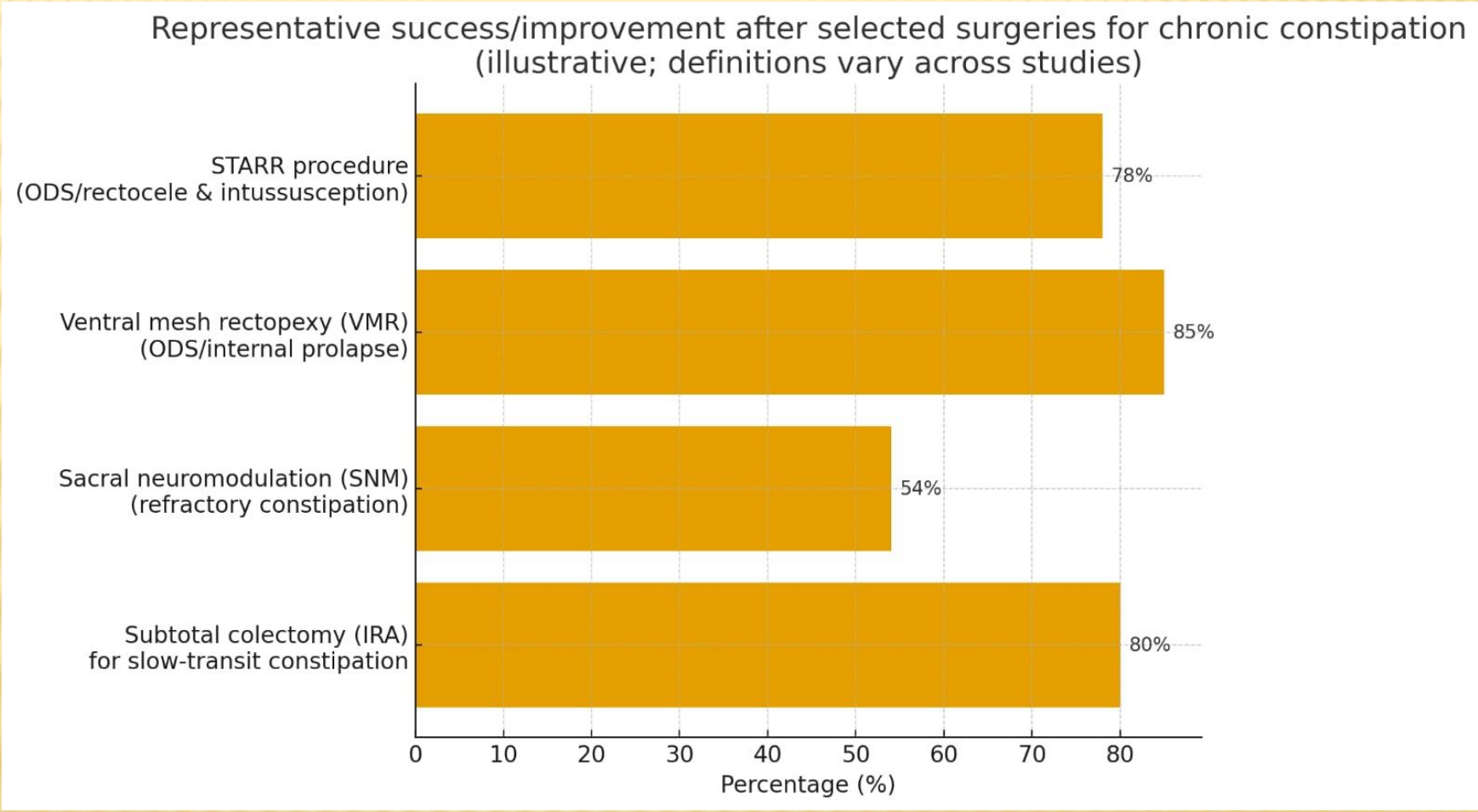
Complications

Minor: wound dehiscence, infection

COMPARATIVE EFFECTIVENESS OF SURGICAL PROCEDURES

Surgical Procedures for Chronic Constipation and ODS				
Procedure	Primary Indication	Success Rate	Common Complications	Long-term Outcomes
Total Abdominal Colectomy				
Laparoscopic Ventral Mesh Rectopexy				
Stapled Transanal Rectal Resection				

SUCCESS RATE COMPARISON



POSTOPERATIVE CARE AND LONG-TERM MANAGEMENT

Immediate Care

- Pain control with analgesics
- Early mobilization to prevent blood clots
- Progressive diet from liquids to solids
- Management of surgical incision

Short-Term Management

- Monitor for surgical complications
- Watch for infection or anastomotic leakage
- Manage bowel function proactively
- Adjust medications based on procedure

Long-Term Follow-Up

- Ongoing dietary advice
- Pelvic floor physical therapy
- Regular follow-up appointments
- Assessment of functional outcomes

CONCLUSION AND FUTURE DIRECTIONS

Patient Selection

Surgery is a last resort for severe, refractory cases. Proper patient selection is the single most important predictor of successful outcomes.

Procedure Choice

Match surgical approach to underlying pathophysiology. Colectomy for slow-transit constipation; anatomically based repairs for ODS.

Multidisciplinary Approach

Essential team includes gastroenterologists, colorectal surgeons, pelvic floor therapists, and dietitians to address all aspects of care.

Realistic Expectation

Set appropriate expectations regarding success rates, potential complications, and long-term outcomes.

FUTURE DIRECTIONS

- Developing minimally invasive techniques with reduced complications
- Advancing preoperative evaluation to better predict outcomes
- Creating more personalized approaches based on patient characteristics
- Improving multidisciplinary collaboration models

THE 8th INTERNATIONAL CONFERENCE OF THE EGYPTIAN PELVIC PATHOLOGY ONCOLOGY GROUP

ALEXANDRIA

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HELNAN PALESTINE HOTEL

Thank you