Algorithm for evaluation and treatment of Fecal Incontinence

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Evaluation of Fecal Incontinence

- **History**
  - obstetric

- **Physical Examination**

- **Tests:**
  - Anal US
  - Manometry
  - PNTML

- Grading instruments e.g.

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### Cleveland Clinic Florida Fecal Incontinence Score

<table>
<thead>
<tr>
<th>Type of incontinence</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>Never: 0</td>
</tr>
<tr>
<td>Liquid</td>
<td>Rarely: 1</td>
</tr>
<tr>
<td>Gas</td>
<td>Sometimes: 2</td>
</tr>
<tr>
<td>Pad usage</td>
<td>Usually: 3</td>
</tr>
<tr>
<td>Lifestyle impact</td>
<td>Always: 4</td>
</tr>
</tbody>
</table>

0 = perfect continence.
20 = complete incontinence.

Never = 0, rarely = <1/month, sometimes = 1/month, <1/week, usually = 1/week, always = 1/day.

*Wexner, Dis Col Rec 1993*
Surgical Strategies

1. Repair
   - Sphincteroplasty
   - Postanal repair

2. Augmentation
   - Injectables
   - Radiofrequency

3. Replacement
   - Artificial Bowel Sphincter
   - Magnetic Anal Sphincter
   - Dynamic / Nonstimulated Graciloplasty

4. Stimulation
   - Sacral Nerve Stimulation
   - Posterior Tibial Nerve Stimulation

5. Diversion
Artificial Bowel Sphincter (ABS)

- Balloon
- Cuff
- Pump
Magnetic Anal Sphincter

Implanted around anal canal to maintain closure

Expands to allow stool passage, then reapproximates

Closed

Open
# PRACTICE PARAMETERS

## The American Society of Colon and Rectal Surgeons’ Clinical Practice Guideline for the Treatment of Fecal Incontinence

Organized search of all relevant English literature through 03/2014

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**TABLE 1. The GRADE system-grading recommendations**

<table>
<thead>
<tr>
<th>Description</th>
<th>Benefit vs risk and burdens</th>
<th>Methodological quality of supporting evidence</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A Strong recommendation, High-quality evidence</td>
<td>Benefits clearly outweigh risk and burdens or vice versa</td>
<td>RCTs without important limitations or overwhelming evidence from observational studies</td>
<td>Strong recommendation, can apply to most patients in most circumstances without reservation</td>
</tr>
<tr>
<td>1B Strong recommendation, Moderate-quality evidence</td>
<td>Benefits clearly outweigh risk and burdens or vice versa</td>
<td>RCTs with important limitations (inconsistent results, methodological flaws, indirect or imprecise) or exceptionally strong evidence from observational studies</td>
<td>Strong recommendation, can apply to most patients in most circumstances without reservation</td>
</tr>
<tr>
<td>1C Strong recommendation, Low- or very low-quality evidence</td>
<td>Benefits clearly outweigh risk and burdens or vice versa</td>
<td>Observational studies or case series</td>
<td>Strong recommendation but may change when higher-quality evidence becomes available</td>
</tr>
<tr>
<td>2A Weak recommendation, High-quality evidence</td>
<td>Benefits closely balanced with risks and burdens</td>
<td>RCTs without important limitations or overwhelming evidence from observational studies</td>
<td>Weak recommendation; best action may differ depending on circumstances or patient’s or societal values</td>
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<tr>
<td>2B Weak recommendations, Moderate-quality evidence</td>
<td>Benefits closely balanced with risks and burdens</td>
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<td>Weak recommendation; best action may differ depending on circumstances or patient’s or societal values</td>
</tr>
<tr>
<td>2C Weak recommendation, Low- or very low-quality evidence</td>
<td>Uncertainty in the estimates of benefits, risks and burden; benefits, risk and burden may be closely balanced</td>
<td>Observational studies or case series</td>
<td>Very weak recommendations; other alternatives may be equally reasonable</td>
</tr>
</tbody>
</table>
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Medical Management

1. Dietary and medical management are recommended as first-line therapy for patients with fecal incontinence. Grade of Recommendation: Strong recommendation based on low- or very low-quality evidence, 1C.

Biofeedback

1. Biofeedback should be considered as an initial treatment for patients with incontinence and some preserved voluntary sphincter contraction. Grade of Recommendation: Strong recommendation based on moderate-quality evidence, 1B.
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**Correction of Anatomical Pathologies**

1. Obvious anatomic defects such as rectovaginal fistula, rectal or hemorrhoidal prolapse, fistula in ano, or cloaca-like deformity should be corrected as part of the treatment of fecal incontinence. Grade of Recommendation: Strong recommendation based on low- or very low-quality evidence, 1C.

**Sphincter Repair**

1. Sphincter repair (sphincteroplasty) may be offered to symptomatic patients with a defined defect of the external anal sphincter. Grade of Recommendation: Strong recommendation based on moderate-quality evidence, 1B.
2. Repeat anal sphincter reconstruction after a failed overlapping sphincteroplasty should generally be avoided unless other treatment modalities are not possible or have failed. Grade of Recommendation: Strong recommendation based on low- or very low-quality evidence, 1C.

3. Plication of the external anal sphincter (Park postanal repair) is not recommended. Grade of Recommendation: Strong recommendation based on moderate-quality evidence, 1B.
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**Injection of Bulking Agents**

1. Injection of biocompatible bulking agents into the anal canal may help to decrease episodes of passive fecal incontinence. Grade of Recommendation: Weak recommendation based on moderate-quality evidence, 2B.

**Radiofrequency Energy Delivery**

1. Application of temperature-controlled radiofrequency energy to the sphincter complex may be used to treat fecal incontinence. Grade of Recommendation: Weak recommendation based on moderate-quality evidence, 2B.
Sacral Neuromodulation

1. Sacral neuromodulation may be considered as a first-line surgical option for incontinent patients with and without sphincter defects. Grade of Recommendation: Strong recommendation based on moderate-quality evidence, 1B.
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Sphincter Replacement Strategies

1. Implantation of an artificial bowel sphincter remains an effective tool for select patients with severe fecal incontinence. Grade of Recommendation: Strong recommendation based on low- or very low-quality evidence, 1C.
Traumatic perineal disruption with lack of sphincter bulk

- No
  - Conservative treatment + physiotherapy + workup
    - Sphincter defect > 120 degrees?
      - Yes
        - Sphincteroplasty
          - Success
          - Failure
            - Persistent Defect
            - Intact repair
      - No
        - SNS
          - Success
          - Failure
            - No

- Yes
  - Colostomy
  - Nonstimulated Graciloplasty
  - ABS

Interested in reconstruction?
- Yes
- No contraindications?