Fecal Incontinence: When it Won't Stop Coming Out

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Overview

- Definitions
  - Continence
  - Incontinence
- Workup
  - History and Physical
  - Scoring Systems
  - Imaging Modalities and Testing
- Treatment
  - Conservative
  - Surgical

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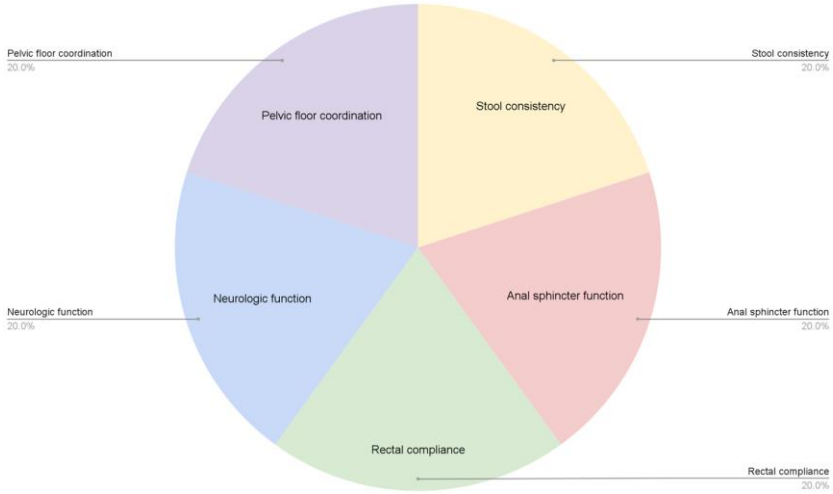
What is Continence?



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Fecal Incontinence

- Uncontrolled passage of stool or gas for greater than 1 month
- Disruption of one of more of the components that comprise continence
  - Stool consistency: from IBD, radiation, IBS, infectious causes, malabsorption
  - Anatomical: sphincter trauma
  - Neurological: stretch injury, diabetes, radiation, chemotherapy, stroke, spinal cord injury
  - Rectal compliance: from radiation, previous surgery
- Affects anywhere between 1-19% of individuals
- Reduces quality of life, increases depression rate

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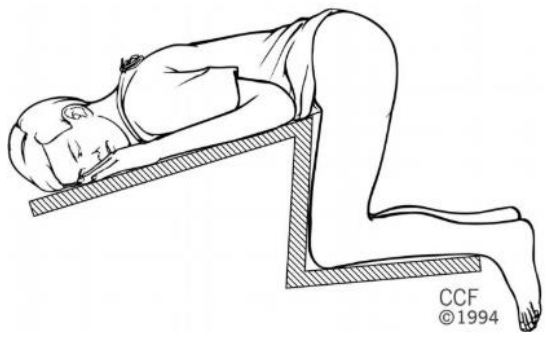
Fecal Incontinence - Workup

- Detailed history
  - Frequency of bowel movements
  - Consistency of bowel movements
  - Recent changes
  - Medical history and medications
  - Previous surgical history
- Physical exam:
  - External examination
  - Bearing down to assess for prolapse
  - Digital rectal exam for tone and squeeze



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Fecal Incontinence - Workup

- Cleveland Clinic Florida-Fecal Incontinence Score (CCF-FIS)

TABLE
Cleveland Clinic Fecal Incontinence Score*[24]

Type of incontinence	Never	Rarely (<1/mo)	Sometimes (≥1/mo but <1/wk)	Usually (≥1/wk but <1/d)	Always
Solid	0	1	2	3	4
Liquid	0	1	2	3	4
Gas	0	1	2	3	4
Wears pad	0	1	2	3	4
Lifestyle alteration	0	1	2	3	4

*A score of 0–perfect continence; 20–complete incontinence (0-5 is considered mild; 6-15–moderate; and 16-20–severe).

- Fecal Incontinence Quality of Life Scale (FIQOL)
  - Rockwood et al., proposed in 2000
  - Assesses 4 domains - lifestyle, coping/behavioral, depression/self-perception, embarrassment
  - Looks at physical, social, emotional, cognitive and behavioral impact of FI

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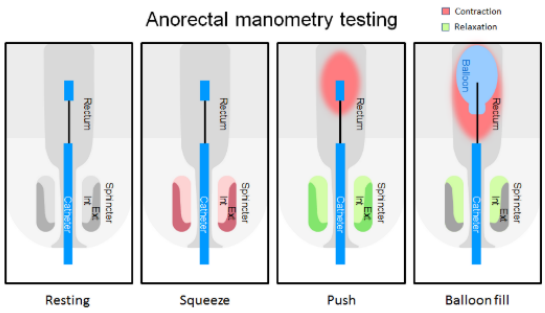
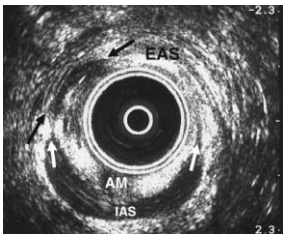
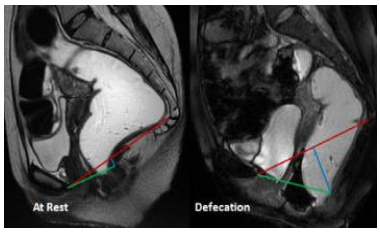
Fecal Incontinence - Workup

- Anorectal Manometry
  - Assess pelvic floor function
- Anal Ultrasound
  - Assess sphincter anatomy
- Neurophysiology Testing
  - Pudendal nerve testing
- Defecography
  - Examines anus, rectum and sphincter muscles as they work in real time
- Colonoscopy







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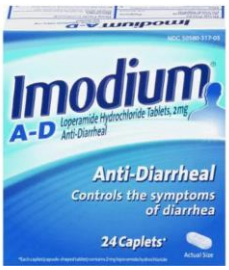
Fecal Incontinence - Treatment



- Conservative
  - Dietary changes
  - Bulking agents
  - Antidiarrheals
  - Enemas/suppositories
- Pelvic Floor Physical Therapy (biofeedback)
- Sphincteroplasty
  - Can be indicated for damage to sphincter muscle during childbirth
  - Ends of sphincter muscle are overlapped and sutured together in a horizontal mattress fashion to bridge the defect
  - Short term (<5 years) results are good with improvement seen in 70-90%
  - High satisfaction but results deteriorate over time

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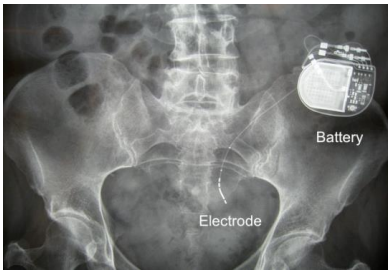
Fecal Incontinence - Treatment

- Sacral Neuromodulation
  - Indicated for patients with moderate to severe fecal incontinence
  - Mechanism of action not well understood: somatovisceral reflex stimulation, direct on anal sphincter complex, afferent neuromodulation
  - Trial period for 1-2 weeks; if greater than 50% improvement, qualifies for permanent placement
  - Wexner et al. (2010):
    - 133 patients - test stimulation, 90% success rate
    - 120 patients - chronic implantation
      - 1 year results: 83% had >50% reduction, 41% had complete continence
      - 5 year results: 89% had >50% reduction, 36% had complete continence
    - Incontinence episodes decreased from mean of 9.4/week to 1.9/week at 1 year, 2.9/week at 2 years
  - Improved quality of life scores
  - Complications: pocket complications, lead complications, infection, pain
  - Reoperation rate is as high as 42%
  - Stimulator needs to be changed every 3-5 years, newer device that is up to 15 years
  - MRI compatible



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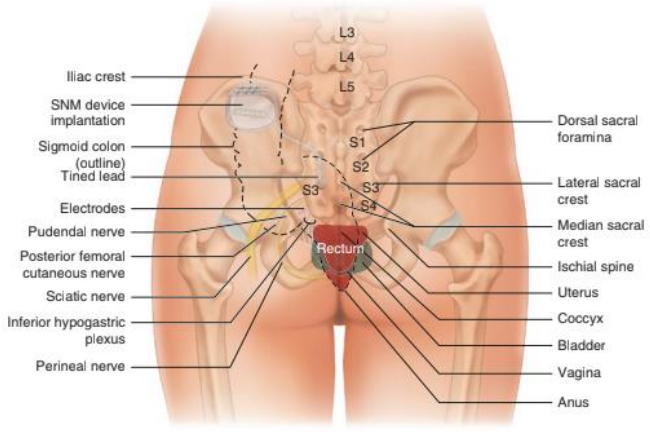
Fecal Incontinence - Treatment



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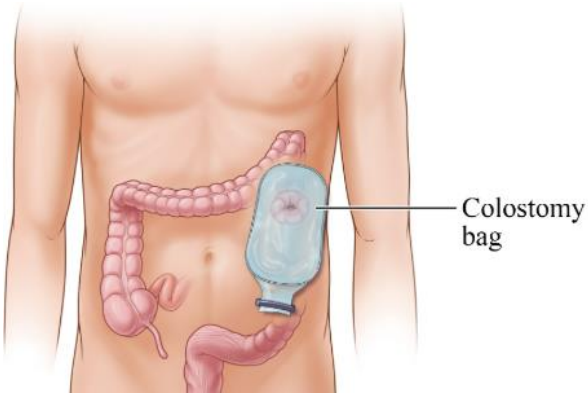
Fecal Incontinence - Treatment

- If these options fail, consider an ileostomy or colostomy for fecal diversion



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Thank You!

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