Faecal Incontinence in 2016 And Sacral Nerve Stimulation

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Faecal Incontinence in 2016 And Sacral Nerve Stimulation

Take Home Messages

- Faecal incontinence is common.
- You need to ask about it – Windows of Opportunity.
- Majority of people can be managed conservatively.
- Excellent surgical options are available.
- Everyone who seeks help is improved.

Why Bother?

- Faecal Incontinence > 1.3 million.
- Urinary incontinence = 4.2 Million.
- 18% of community dwelling adults
- 47% of Nursing Home residents
- FI is NOT a part of aging.
- FI is slightly more common among women.

Patients Don’t Tell

- Stigmatising condition.
- Occurs at any age.
- Misconception in community that it is part of aging.
- Windows of opportunity to ask:
  - PAP smear
  - Flu vacs
  - Post partum
  - Prostate checks
  - Medication reviews

Multifactorial – Last Straw

- It is a sign or a symptom – NOT a diagnosis.
- Important to dx the cause(s) for each individual.
- Some factors are relatively simple to reverse.
- “LAST STRAW THEORY” - Adele Burgess
  - Often addressing and reversing one issue is enough.

Pathophysiology of Faecal Incontinence

Evaluation

- **History**
  - Symptoms
  - Bowel habits
  - Diet
  - Obstetric Hx
  - Medication and
  - Other medical problems.

- **Examination**
  - Digital Rectal Examination
    - Rule out cancer
    - **ASK PATIENT TO BARE DOWN** - rectal prolapse or large haemorrhoids

Diagnostic tests

- **Bloods**
  - TFT, PTH, Ca+2, HbA1c, U/E/Crt, Fe studies, CRP, B12, Coeliac screen.

- **Stool**
  - M/C/S and Faecal calprotectin

- **Gastroscopy & Colonoscopy**

- **Manometry/ Ultrasound and Pudendal Nerve testing**

Ultrasound

Manometry

Pudendal Nerve testing

Common ‘Reversible’ Causes

- Faecal loading
- Treatable causes of diarrhea (e.g. infective, inflammatory bowel disease and irritable bowel syndrome, medications i.e.. Metformin, PPI, NSAID)
- Rectal prolapse or third-degree haemorrhoids
- Lower gastrointestinal cancer
- Acute anal sphincter injury including obstetric and other trauma
- Acute disc prolapse/cauda equina syndrome.
Management

- Dietary
- Bowel Regime
- Lifestyle
- Mobility Aids
- Medical Therapy
- Physiotherapy
- Surgery

Stool Modification and Management

- Fiber as a bowel normalizer
  - Metamucil – psyllium husks
- Enemas

Pharmacological management

- Anti-diarrheal medications.
  - Loperamide (Imodium) – decrease stool frequency and increase sphincter tone

- Low dose tricyclic antidepressants
  - Amitriptyline (1)(2)


Surgery

- Correcting haemorrhoids or prolapse
- Injectable bulking agents – i.e., Solesta injected directly into the anal canal
- Sphincter repair – if there is a defect
- Artificial sphincter
- Stoma
- Sacral Nerve Stimulation

Sphincter repair
Ultrasound sphincter defect

Sphincter repair

Sphincter repair

Long-Term Results Of Overlapping Sphincter Repair

3 months n=86

40 months n=74

Karoui et al. DCR June 2000

Long-Term Results Of Overlapping Sphincter Repair

89%

11%

77 months n=38

Maluf, Lancet Jan 2000

Published international guidelines: Bowel

SNM, Sphincter repair, SNM, Graciloplasty, Artificial sphincter, Bulking agent, Anterograde irrigation, Colostomy

Diet, behavioural, biofeedback, medications

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Sacral Nerve Stimulation

What is it?
- Programmable stimulator
- Delivers low amplitude electrical stimulation via a lead to the sacral nerve.
- Usually accessed via the S3 foramen.
- Minimally invasive procedure
  - can be done under sedation.
- Two steps –
  - Stage 1 - trial
  - Stage 2 - permanent implant

What Is It For?
- Faecal Incontinence
- Urinary Urge Incontinence, Urinary Frequency, and Urinary Retention
- Pain
- Idiopathic constipation
- Chronic anal fissure
- Reduction in pressure ulcers
- ? Sexual function

How Does It Work? Bottom/Gut/Head
- Increased awareness of pelvic floor
  - Sensory homunculus representation (Elabbady, 1994)
- Recruit residual sphincter function
  - Striated and smooth muscle (Tjandra, 2004)
- Decreased rectal contractility
- Changes in colonic motility
  - Bi-directional peristaltic activity (Dinning, 2012)
- Modulation of anorectal reflexes
  - Spinal and central (Kenefick, 2004)
- Affect on brain function
  - Sheldon, 2005

What Does It Involve?
Stage 1: ‘Try Before You Buy’
- 10 – 14 day trial
- Insert electrode to S3/S4 foramen
- Connect to external pulse generator.
- Minimally invasive.
- Can be done under sedation alone.
- If positive response then can go on to have a permanent stimulator implant.
What Does It Involve?

- Permanent implant if good response to stage 1.
- Minimally invasive
- Under sedation

Post-op scar
Tune Up

Outcomes?

Sacral Nerve Stimulation

- Overall success rate is reported to be between 70 and 80%. (3,4)
- Long-term efficacy in patients treated with SNS, and the beneficial results remain for as long as 13 years after implantation.


Common Complications

- implant site pain (25.8%),
- a sensation of tingling, pricking, or numbness of the skin (12.5%)
- implant site infection (10.8%).

SNS Outcomes

3 Months

- 43%
- 32%
- 19%
- 6%

36 Months

- 43%
- 32%
- 19%
- 10%
- 5%
Quality of Life

New Indications

- 70% - 80% improvement in idiopathic faecal incontinence,
- 76% improvement after sphincter rupture/episiotomy,
- 78% improvement after anal repair, and
- 73% improvement in neurological injury (4)

Summary

- Don’t accept incontinence – we can improve symptoms
- You need to ask about symptoms
- Majority of patients can be managed conservatively.
- Good surgical options are available.
- Sacral Nerve Stimulation
  - Minimally invasive
  - Simple procedure
  - ‘try before you buy’
  - Life changing.

Faecal Incontinence in 2016

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