

Bowel blues after bowel procedures – the way forward

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Mr NG

- 43 year old self employed electrician
- Low anterior resection for rectal cancer 2 years previously
- “Don’t know why you bothered to save my life”
- Frequency, urgency, urge and passive FI
- Unable to work, wife supporting family
- Sleeps in separate bedroom
- “I’m completely useless”
- Nobody had asked about symptoms for 2 years
- Depressed and suicidal

Overview

- Many people report altered bowel function after pelvic surgery or radiotherapy
- Under-reported and not always taken seriously?
- Almost no intervention studies to see if what we do for FI or constipation generally would work
- Time for active case-finding and determining which interventions work

Colorectal procedures & FI

- Colectomy & IRA: 25-35% day; 32-52% night +/- pouch
- Colo-anal anastomosis: 18-49%
- Sphincterotomy for fissure: 11% long term FI
- Haemorrhoidectomy: 33% some AI, 13% FI

Other pelvic procedures & FI

- Radical prostatectomy: 9-15%
- Rectocele repair?
- Hysterectomy?
- POP surgery?
- Rectal prolapse repair?

Anterior resection

- Surgeons and oncologists rightly concentrate on techniques for the cure of cancer
- Early complications (leaks) can be serious
 - 11% in 84 studies (*Paun et al Annal Surg 2010*)
 - Defunctioning stoma reduces risk (*Huser, Annals Surg 2008; Montedori, Cochrane review 2010*)
- Few studies report incontinence rates (*Paun et al 2010*)
- Various techniques for optimising function
 - Pouch? (with evacuation difficulty?) (*Hida & Okuno Surg Today, 2010*)

Anterior resection syndrome

- Constellation of troublesome symptoms
- Urgency, frequency, erratic bowel habit, incontinence, tenesmus, evacuation difficulty
- Price to pay for cure with no stoma??
- Worse outcome if no RAIR and weak sphincters
- Does function improve over time (or do we just hope it does? – conflicting evidence)
- Recent Cochrane review has questioned if QoL better for Anterior Resection than Abdomino-Perineal Excision of Rectum (*Pachler 2010*)

Anterior resection syndrome

- Limits quality of life and activities
- Do patients adjust their expectations of what is “normal”?
- May limit return to work
- For a few life is truly miserable
- Quality of “Survivorship” now important as cancer has become a long term condition
- Very little attention to date

Prevalence of problems

- Up to 50% (+/- radio)? (*Szynglarewicz 2009*)
- 14/61 AR + TME (*Pala et al 2009*)
- Similar to pre-op (cancer) symptoms and higher than age matched controls (*Ortiz 1996*)
- Faecal Incontinence: 6-87%
- Urgency: 5-87%
- 3+ Bowel Motions/day: 4-75%
- Related to absent RAIR and weak sphincters (*Kakodkar 2005*)
- Is this different definitions or genuine differences?

Late effects of radiation

- Bowel obstruction (9-13%)
- FI and urgency (50-60%? 2x non-irradiated)
- Evacuation difficulty
- Sexual dysfunction
- Less in recent studies: techniques improving?
- *Birgisson et al, Acta Oncologica 2007*

Symptoms (Ortiz 1996)

	Pre op	1 yr Post op	Controls
Frequency	3.9/day	2.3/day	1.3/day
Erratic	44%	44%	12%
Urgency	40%	40%	12%
Obstructed	20%	20%	4%
Tenesmus	48%	24%	12%
Discriminate	20%	16%	100%
FI leaks	32%	52%	8%

Patient experience - ARS

- Qualitative interviews, 7 patients, 1 year post op.
Themes:
 - Adapting to physical changes (expected, but difficulty controlling and managing symptoms)
 - Psychological adaptation (acceptance of unpredictability)
 - Stigma perceived
 - Lack of confidence and normality
 - Many used inappropriate strategies
 - Reluctant to discuss symptoms
- *DeSnoo & Faithfull Euro J Cancer Care 2006*

Patient experience (deSnoo)

- “You do get frightened, you think is this normal”
- “It’s part of life. You just have to accept it and not dwell on it”.
- “I just feel lucky to be alive, so whatever I have to cope with, it really does not matter”

Interventions – few studies

- Biofeedback + electrical stim improved
10/14 *Pala et al 2009*
- Pneumostimulation (?) + Biofeedback
improved outcomes in 45 patients *Dubovyi
2006 (Ukrainian)*

Biofeedback?

- 2 studies, ? same patients (n = 11 & 13): halved stool frequency, FI reduced from 14 to 1.8 per week. No changes in ARP. (*Ho et al 1996 & 1997*)
- A further study in press (DCR) – case series of 70 patients – showed benefit
- Not just exercises – also coordination training and balloon distension
- We have a study in progress

Medication?

- Loperamide for loose stool (but may make tenesmus worse?)
- Bulking agents?
- Laxatives?
- Water enema?
- Standard enema or suppositories?
- No studies for evidence

Diet and fluids

- Low residue?
- High fibre?
- Caffeine?
- Alcohol?
- No evidence

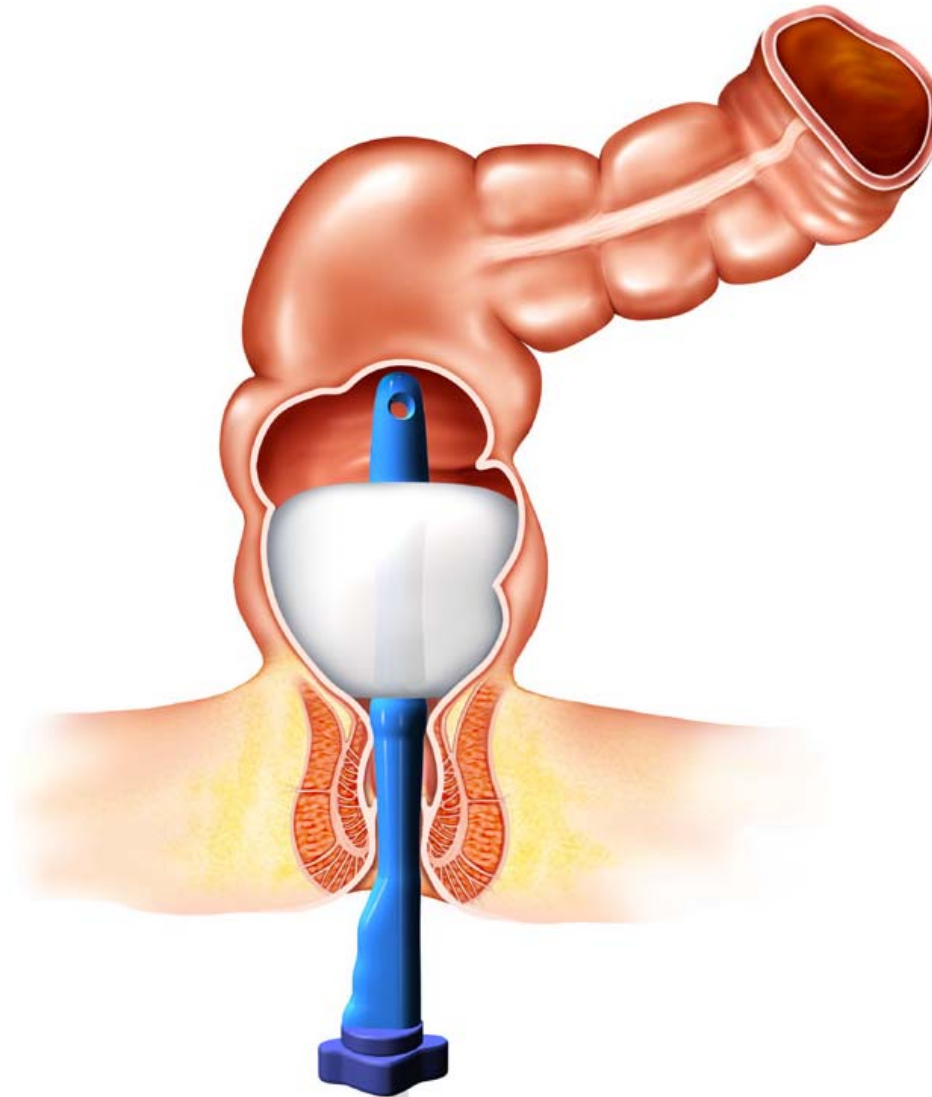


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Irrigation?

- Used to address both incontinence and incomplete evacuation
- Daily or alternate day, self administered, 200-1000 mls, on toilet
- Irrigation in 29 patients after AR or pouch surgery: 79% effective but many drop out (*Gosselink et al 2005*)

Irrigation improves QoL in LAR

- 14 patients 9-48 months after LAR (10 + radiotherapy)
- Defaecation 8/day(range 4-12) & 3/night (range 2-5)
- Irrigation with 900mls (range 500-1500) daily
- 15-46 months later: 1/day (1-2) and 0/night (0-0) + improved QoL
- *Rosen et al DCR 2011*

Reconstructive techniques after rectal resection

- Colonic J pouch superior to straight coloanal anastomosis up to 18 months (but no longer term studies)
- No difference side to end, J pouch or transverse coloplasty (small studies)
- *Brown at al, Cochrane review 2008*

What we do – same as usual

- Patient teaching and understanding
- Bowel habit and complete emptying
- Sphincter or pelvic floor exercises
- Behaviour modification - urge resistance
- Diet, caffeine, lifestyle, stool bulkers
- Practical coping & medication titration
- Emotional support
- If does not work: biofeedback, then irrigation

Ms. KS, 59 years old, ovarian Ca, radiation damage, FI and diarrhoea



Conclusions - ARS

- Symptoms are common and troublesome
- Patients feel stigmatised and complain little (price to pay for cancer cure?)
- Almost no good intervention studies
- Need for active case-finding and development of effective interventions

Surgery for constipation?

- Very mixed reports
- Varies by country: USA common for STC?
- Are patients satisfied and happy?
- A significant minority have frequency/diarrhoea (46%), FI (21%) and pain (41%)
- High morbidity: 15% mortality and re-operation (50%)
- (*Riss 2009*); 46% complications (*Zutshi, Cleveland Clinic 2007*)
- Nearly all very small numbers
- Selection undoubtedly important

Ileo-anal pouch

- IBD or cancer
- High, variable % some FI (more at night)
- Evacuation difficulty also troublesome
- Straight anastomosis poorer function (*Koh et al IJCD 2007*)

FI following prostate radiotherapy

- 1.6-58% (variation in definitions and methods)
- Mechanism unclear: damage to rectal muscle nerve plexus?
- Equivocal relationship to dose-volume parameters (lower rectal/anal parameters most important but seldom reported?).
- Only one intervention study in 15 patients (phenylephrine: 50% found it useful)
- One report of 2 patients with a stoma
- *Maeda Norton et al Radiotherapy and Oncology 2011*

Other radiotherapy & FI

- Cervical: surgery alone 8%; + radiotherapy 25%
(Bergmark Acta Obs Gyn Scand 2002)
- Others?

Nurse led management of pelvic radiation disease

- Damage to bowel tissue (can be extensive)
- 50% altered bowel function (all tumours)
- 20-40% moderate to severe effect on QoL
- 83% well managed by nurse specialist
(*Benton, Norton et al, Clinical Oncology 2011*)
- RCT comparing booklet, nurse or gastroenterologist 6 months after radiotherapy just completing

Stoma?

- Is it always a “failure”?
- When should we discuss?
- Is “stoma-saving” always to the patient’s advantage?
- Are we always right to try to avoid a stoma at all cost?

Mr NG

- Loperamide (Imodium) helped a lot (nobody had suggested)
- Bowel retraining + exercises
- Low fibre diet (high fibre works for some)
- Antidepressants + Cognitive Behavioural Therapy
- Took about 9 months to re-build confidence
- Could this have been prevented by earlier advice??

Correction from yesterday:

www.nice.org.uk/CG49

Bowel blues after bowel procedures

- Common & seldom asked about
- Can cause misery
- Few access help & services
- Almost no intervention studies
- Time for a change
- Opportunity for multidisciplinary collaboration
- Improving bowel function after bowel surgery
publication available