FAECAL INCONTINENCE

Involuntary loss of liquid/solid stool

AETIOLOGY

1. **Sphincter injury**
(i)obstetric: commonest cause in women (long 2nd stage, instruments, episiotomy, high birthweight) (ii)iatrogenic: haemorrhoidectomy/fistulotomy (high/complex/repeat procedures) (iii)trauma
2. **Rectal volume:** proctectomy/low ant res. (worse w/ DXT)
3. **Rectal compliance**: stiffens w/ radiation proctitis/IBD
4. **Obstructive defectation**: intussusception/rectocoele → incomplete emptying w/ reversal of rectoanal inhibitory reflex
5. **Idiopathic FI**: (i)Pudendal neuropathy (PNTML^/MNFD^/low squeeze pressure/decreased anorectal sensation/hypersensitivity)
(ii)Perineal descent: chronic straining/vaginal deliveries (damage pudendal nerves and sphincters)

CLINICAL FEATURES

Incontinence patterns:
Urge (cannot defer movement) = EAS or proctitis/carcinoma *Or mix of both*
Passive (unaware of leakage)= IAS/anatomical deformity eg FIA

History:
Frequency/Urgency/Severity/Consistency/Tenesmus/Incomplete evacuation/Need to digitate/Bleeding/Bloating
Assess for/exclude: faecal loading, diarrhoea causes, cancer, prolapse, 3° piles, acute sphincter injury, acute neuro deficit
PMHx: Surgical/obstetric/urinary ||FHx: ||Medx: || SHx: QoL

Examination:
Abdominal:
Anorectal: gaping anus due to low tone; resting tone+voluntary squeeze (EAS/IAS), sphincter defects,
Perineal: scarring of obstetrics/surgery/trauma, descended perineum (on straining), prolapse/rectocoele

Investigations: **PNTML/MNFD rarely useful**
Manometry: IAS (resting) + EAS (voluntary) squeeze → both low
EAUS: Sphincter defects
MRI defecography: obstructive defecation symptoms

MANAGEMENT

Conservative Management:
Diet: stool consistency (fibre/fluids)
Meds: stool bulking (loperamide 0.5mg-16mg/day; syrup) ||rectal emptying (supps/enemas/oral laxatives/rectal irrigation)
Pelvic floor physio:
Biofeedback: retraining strength, coordination, sensation (10-15 sessions w/ 6 mthly follow-up)
Anal plug: expands when soaked by faecal contents → useful if reduced sensation eg neurological deficits

Surgery:
1.Sphincter Defect → (i)repair if 90-120° (ii)injection/artificial sphincter/ACE/end colostomy if >120°
2. No Sphincter Defect → SNS test → (i)implant if +ive test (ii)injection/artificial sphincter/ACE/end colostomy if -ive

(a)Sphincteroplasty (anterior/overlapping): 90-120° EAS defect **outcome deteriorates with followup**
Not beneficial if: IAS defect, EAS atrophy, multiple defects, fragmentation, pudendal neuropathy, diarrhoea, IBS
(b)Sacral Nerve Stimulator: recruit add. function from sphincters/pelvic floor + colonic motility + lower rectal sensory threshold
Contraindications: sacral pathology, skin disease, sphincter damage, pregnancy, bleeding risk, PPM or defib, mentals
(c)Injection: bulking+fibrosis in submucosal/intersphincteric plane (short, limited efficacy) **passive FI due to IAS dysfunction**
(d)Artificial sphincter: lower rectum/upper anal canal cuff +LM/scrotum pump (const/balloon perf) **NICE: severe end-stage FI**
(e)Antegrade Continence Enema: appendi/caeco/ileostomy irrigation to empty colon/rectum
(f)End colostomy: severe end-stage FI when all other treatments contraindicated/failed
(g)Other: PTNS/TENS peripheral, terminal ambulatory stimulation of tibial nerve at malleolus for mild idiopathic FI/spinal trauma