

CHRONIC ANAL FISSURE

- “painful tear or split in distal anal canal”
- most acute fissures heal spontaneously
- chronicity is defined by both chronology and morphology.
 - Chronology: > 6wks → unlikely to heal
 - Morphology: presence of visible transverse internal anal sphincter, indurated edges, a sentinel pile and a hypertrophied anal papilla.
- Chronic fissure:
 - usually associated with internal anal sphincter spasm
 - relief of spasm is central to promoting fissure healing.
 - treatment has undergone a transformation in recent years from surgical to medical
 - anal canal is relatively poorly perfused, especially in the posterior midline, worsening with spasm of internal sphincter

Surgical treatment

- **Manual dilatation of the anus**
 - Primary treatment for chronic anal fissure in the past for many years
 - stretch/tear internal sphincter using Parks’ speculum
 - two and eventually four fingers →
 - often causes uncontrolled ‘tearing’ of the sphincter muscles resulting incontinence 20-25%
- **Lateral internal sphincterotomy**
 - Eisenhammer introduced posterior internal sphincterotomy in 1951.
 - lateral subcutaneous sphincterotomy was popularized by Notaras in 1969 →
 - surgically controlled partial internal sphincter division.
 - surgical reduction in MRP of 25% from baseline
 - The incidence of incontinence has been poorly documented but varies between 0-36% for incontinence for flatus; 0-21% incontinence to liquid stool; and 0-5% for solid stool incontinence.
 - Reasons for incontinence after sphincterotomy → complete division of sphincter or external sphincter damage
 - Women are more at risk (shorter anal sphincters and occult obstetric sphincter defects)
 - -19% of men and 42% of women had low or low normal MRP
- **Techniques to make sphincterotomy safer**
 - ultrasonographically guided internal sphincterotomy
 - Mylonakis et al.²
 - randomized 50 patients to either standard or ultrasonographically guided surgery.
 - There were more complete internal sphincter defects and a greater reduction in MRP with the latter, but healing and incontinence rates were similar in both groups.

References:

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4. Pescatori M et al. ‘Spasm-related’ internal sphincter in the treatment of anal fissure. A randomised, prospective study. *Coloproctology* 1990; 1: 20–22.
5. Brisinda G, et al. A comparison of injections of botulinum toxin and topical nitroglycerin ointment for the treatment of chronic anal fissure. *N Engl J Med* 1999; 341: 65–69.

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