

POUCH-VAGINAL FISTULA AFTER RESTORATIVE PROCTOCOLECTOMY

Introduction:

- Pouch – vaginal fistula reported to occur with frequency of 3-16%
- Predisposing factors include
 - Trauma induced by anterior dissection of rectum during its mobilization
 - Ectopic or anteriorly displaced anus
 - Age (<50)
 - Steroids
 - Anemia
 - Previous anorectal procedures
 - Preoperative/postoperative diagnosis of Crohn's
 - History of rectovaginal fistula
 - Pelvic sepsis
 - Previous colectomy for toxic colitis
- Evaluation
 - Pouchoscopy
 - Barium enema
 - Water test – fill vagina with water and inject air into pouch – look for bubbles
 - Methylene blue – fill pouch with methylene blue retention enema and place tampon in vagina
- Management options
 - Treatment of pelvic/septal sepsis
 - Transanal preferred over transvaginal repair due to higher pressure system in the pouch
 - Treatment of distal stricture
 - Tension free repair
 - Ileal advancement flap
 - “Redo RP/IPAA”
 - Pouch excision
- Shah, et al. Management and Treatment Outcome of Pouch-Vaginal Fistulas Following Restorative Proctocolectomy. Diseases of the Colon and Rectum, July 2003
 - Chart review of all patients undergoing PVF repair at Cleveland Clinic from 1983-2000
 - Demographics, pre-/post-op diagnosis, operative techniques, presence of post-op sepsis, treatment of fistula repair, proximal diversion
 - Resolution of symptoms and confirmation of fistula closure considered successful outcome

- 60 patients reviewed
 - 2,265 pts s/p RP, 993 F, **33** with PVF (3.3%)
 - **27** patients referred from outside hospitals
 - 53 (88%) Ulcerative Colitis, 6 (10%) indeterminate colitis, 1 (2%) FAPC, 12 (20%) previous anorectal surgery before RP
 - 48 (80%) J pouch (hand sewn or stapled), 52 (87%) diverting ileostomy – no bearing on time to PVF presentation
 - 17 (28%) peri-pouch abscess
 - Median time to presentation – 21 months; 21 pts (35%) - early (<6 mos), 33 (55%) – late (>12 mos), 6 (10%) – intermediate (6-12 mos); occurred earlier in patients with septic complications (9 vs. 42 mos, p<0.05)
 - PVF site – 50 (83%) with fistula at or below anastomosis
 - Diagnosis – 24 (40%!!) ultimately diagnosed with Crohn’s – time to PVF longer in this group (43.8 mos v. 26.5 mos, p = 0.07)
 - Primary Repair
 - 46 (77%) local – 39/46 IAF
 - 6 (10%) redo RP
 - 5 (8%) pouch excision (4/5 with Crohn’s)
 - others – trans-vaginal, diversion
 - 39 (65%) fecal diversion at time of PVF repair including 14 with fistulas forming before closure of an ileostomy made at time of RP
 - Recurrence after primary repair
 - 17/39 treated with IAF healed after first repair – early fistulas healed better
 - 3/6 treated with redo RP healed after first repair
 - Recurrences treated with either repeat IAF, RP or eventual pouch excision
 - overall, 31 patients healed (52%) after median follow-up of 49.4 months
 - 21/43 patients who had IAF as 1st or 2nd procedure healed
 - 10/16 patients with RP as 1st or 2nd procedure healed
 - 13/60 patients had pouch excision (8/24 patients with Crohn’s eventually had pouch excised)
 - 26 % patients treated had persistent fistulas with pouch in place
- Gorfine, et al. Long-Term Results of Salvage Surgery for Septic Complications after Restorative Proctocolectomy. Diseases of the Colon and Rectum, October 2003.
 - Septic complications occur in 6-16% of patients undergoing Ileal Pouch-Anal Anastomosis (IPAA)
 - Evaluates series of pouch salvage procedures for IPAA sepsis with secondary goal of examining role of protective ileostomy at RP
 - Prospective database from 1987 to present time reviewed – IPAA related sepsis included anastomotic dehiscence with sinus, abscess, perineal or vaginal fistula
 - 836 patients, 51 with IPAA sepsis, 31 F, 8/31 (25.8%) with RVF
 - 50 (98%) UC preop, 1 (2%) indeterminate colitis

- 27/51 (7.8 % of total cases)diverted at time of RP – diversion did effect rate of IPAA sepsis
- 89 salvage procedures performed – 27 patients (52.9%) with 2 or more procedures
- 85/89 (95%) trans-anal advancement flap, 4/89 (5%) abdominoperineal approach with redo IPAA, 37/85 transanal procedures done with diverting ileostomy before or during procedure
- 10 patients (20%) healed after first transanal repair – diversion did not affect healing rate after first repair or eventual need for pouch excision
- Overall, 34 patients (66%) retained pouch, 21 (41%) ultimately healed, 17 (33%) underwent pouch excision, 5 (9.8%) persistent fistula with diversion, 8 (15.7%) persistent fistula without diversion
- Conclusions:
 - ileostomy at time of RP does not protect against IPAA septic complications with caveat that they are performed in “difficult cases”
 - IPAA complications are uncommon but difficult problems
 - Transanal advancement flaps used almost exclusively – no effect of protective ileostomy at time of repair