

Table 2 – Surgical procedure performed for common colorectal causes of diarrhea

S.No.	Diagnosis	Treatment
1	Ulcerative colitis – refractory to medical therapy	Restorative proctocolectomy (ileal pouch anal anastomosis –IPAA) Total proctocolectomy with permanent ileostomy (if fecal incontinence present)
2	Ulcerative colitis – presence of cancer/dysplasia	IPAA can be performed unless there is tumor in middle or lower rectum
3	Ulcerative colitis with emergency indications for surgery (fulminant colitis, toxic megacolon, bleeding)	Subtotal colectomy with ileostomy and closure of rectal stump/rectal mucus fistula followed by IPAA at later stage. Emergency proctocolectomy might be required if bleeding is indication for surgery.
4	Extensive colonic crohn's disease without rectal involvement	Total colectomy with ileorectal anastomosis
5	Limited colonic crohn's disease without rectal involvement	Segmental resection and anastomosis
6	Extensive colonic crohn's disease with rectal involvement	Total colectomy with intersphincteric proctectomy with permanent ileostomy
7	Extensive colonic crohn's disease with rectal involvement in a poor risk patient	Total colectomy with low hartmann's closure of rectum with permanent ileostomy
8	Ischemic colitis – segmental colitis with protein losing enteropathy	Segmental resection with primary anastomosis/ stoma formation

- Unacceptable side effects of medical treatment
- Complication like uncontrolled bleeding, toxic megacolon, perforation etc
- Presence of dysplasia or carcinoma

Most commonly performed and preferred surgical procedure for ulcerative colitis is restorative proctocolectomy with or without fecal diversion. Other procedure performed are subtotal colectomy with ileorectal anastomosis in patients with rectal sparing ; proctocolectomy with Brooke ileostomy in patients with anal incontinence or dysplasia/carcinoma involving lower third of rectum; proctocolectomy with continent ileostomy (Table 2).

Indications for surgery in colonic Crohn's disease are-

- Intra-abdominal abscess,
- Medically intractable fistula,
- Fibrotic stricture with obstructive symptoms,
- Complications like toxic megacolon, hemorrhage, Carcinoma

Treatment of Crohn's disease is essentially palliative and recurrence is frequent so aim of surgery is to alleviate symptoms and conserve bowel. Taking wide margins does not reduce the likelihood of recurrence and repeated resection will result in small bowel syndrome. Colonic Crohn's disease should be treated with segmental colonic resection if disease is limited ; total proctocolectomy with end ileostomy for extensive disease involving colon and rectum. Restorative proctocolectomy (IPAA) is contraindicated in Crohn's disease (Table 2).

Patients with segmental ischemic colitis who remain symptomatic with pain, bleeding, diarrhea (protein losing enteropathy) or recurrent bouts of sepsis for 2 to 3 weeks after presentation with no improvement in conservative treatment may require operation. Segmental bowel resection with primary anastomosis or construction of stoma is performed depending upon the nature of bowel <sup>15</sup>.

## REFERENCES

1. Drossman DA, Thompson WG, Talley NJ, Funch-Jensen P, Janssens J, Whitehead WE. Identification of sub-groups of functional gastrointestinal disorders. *Gastroenterol Int* 1990; 3:159–172.
2. Thompson JC, Marx M. Gastrointestinal hormones. *Curr Probl Surg* 1984; 21:6.
3. Chaussade S, Guerre J, Couturier D. Measurement of colonic transit. *Gastroenterology* 1987; 92:2053.
4. Agachan F, Pfeiffer J, Wexner SD. Defecography and proctography. Results of 744 patients. *Dis Colon Rectum* 1966; 39:899–905.
5. Loening-Baucke V, Pringle KC, Ekwo EE. Anorectal manometry for the exclusion of Hirschsprung's disease in neonates. *J Pediatr Gastroenterol Nutr* 1985; 4:596–603.
6. Low PS, Quak SH, Prabhakaran K, Joseph VT, Chiang GS, Aiyathurai EJ. Accuracy of anorectal manometry in the diagnosis of Hirschsprung's disease. *J Pediatr Gastroenterol Nutr* 1989; 9:432–436.
7. Swash M, Snooks SJ. Electromyography in pelvic floor disorders. In: Henry MM, Swash M, eds. *Coloproctology and the Pelvic Floor*. London: Butterworth, 1985.
8. Halligan S, Thomas J, Bartram C. Intrarectal pressures and balloon expulsion related to evacuation proctography. *Gut* 1995; 37:100–104.
9. Aldridge RT, Campbell PE. Ganglion cell distribution in the normal rectum and anal canal. A basis for the diagnosis of Hirschsprung's disease by anorectal biopsy. *J Pediatr Surg* 1968; 3:475–490.
10. Goto S, Ikeda K, Nagasaki A, Tomokiyo A, Kusaba M. Hirschsprung's disease in an adult. Special reference to histochemical determination of the acetylcholinesterase activity. *Dis Colon Rectum* 1985; 27:319–320.
11. Pfeiffer J, Agachan F, Wexner SD. Surgery for constipation. A review. *Dis Colon Rectum* 1996; 39:444–460.
12. Gladman MA, Scott SM, Lunniss PJ, Williams NS. Systemic review of surgical options for idiopathic megarectum and megacolon. *Ann Surg* 2005; 241: 562–574.
13. Thompson WG, Longstreth GF, Drossman DA, et al: Functional bowel disorders and functional abdominal pain. *Gut* 1999; 45(Suppl 2):43.
14. Fefferman DS, Farrell RJ. Endoscopy in inflammatory bowel disease: Indications, surveillance, and use in clinical practice. *Clin Gastroenterol Hepatol* 2005;3:11–24.
15. American Gastroenterological Association Medical Position Statement : Guidelines on intestinal ischemia. *Gastroenterology* 2000; 118:951-95.

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