

CROHN'S COLITIS

Milestones

1932: Crohn's describes a chronic granulomatous disease of the terminal ileum.

1952: Wells points out that Crohn's disease could affect the colon as segmental colitis.

1959: Brooke described granulomatous disease of the large and small intestine.

Clinical characteristics

Normal appearing rectum with proximal colonic disease, Perianal fistulas or abscesses, indurated ("elephant ear") anal skin tags, aphthoid ulcers, serpiginous longitudinal ulcers, especially when intervening mucosa looks normal or simply edematous, broad indolent large or lateral fissures or anal canal ulcers, extracolonic disease, skip lesions, internal fistulae.

Epithelioid granulomas present in only 25-66% of the patients. More common in ileocecal area and anorectum

Also characteristic: transmural inflammation and fissural ulcers

Colonic involvement is present in 29-44% of all Crohn's disease patients.

Average time from diagnosis to operation 7.5 years

Risk of colorectal cancer 20 times higher.

Surgical treatment controversial (high recurrence rates)

Indications for surgery:

- failure of medical therapy
- stricture
- inflammatory / neoplastic mass
- fistula
- abscess
- obstruction
- bleeding
- growth retardation
- perforation / peritonitis

Factors determining type of procedure:

Location of the disease, the indication and its urgency, the age and general fitness

Need for proctectomy depends on the extent and site of the disease, the presence of perianal disease, continence status, and the patient attitude toward a permanent stoma.

Surgical procedures:

- Subtotal colectomy and ileostomy
 - o For failure of medical therapy, toxic colitis, in patients with marked malnutrition or major concurrent illness, and in chronic colitis with uncertain diagnosis
- Abdominal colectomy with ileorectal anastomosis
 - o In patients with partial or total involvement of the colon with rectal sparing. Preserves intestinal continuity, and avoids / delays the need for proctectomy and stoma. The downside: relatively high recurrence rate, risk for poor functional outcome.
- Ileostomy

- With simultaneous repair of incontinent sphincters or repair of perianal and rectovaginal fistulae, or in high risk patients (pregnancy, elderly) as a temporary measure.
- Total proctocolectomy and ileostomy
 - For extensive colitis, especially if there is significant anorectal component, or for a colitis with accompanying sphincter dysfunction.
 - One or two stage operation
 - Rate of small bowel recurrence 3-46%
 - Rate of nonhealing of the perineal wound 19-34%
- Segmental colectomy
 - For patients with relatively short segments of colonic disease, in patients vulnerable to dehydration (e.g. previous small bowel resection) and in older patients.
- Restorative proctocolectomy
 - Reserved for relatively healthy patients, w/o extracolonic disease, w/o dysplasia or cancer
 - 64% success rate over a median follow up of 38 months
 - 25% rate of pouch removal (compared to 1.8% for UC)

Segmental resection (vs. total colectomy)

0% mortality (after the first resection); 14% morbidity

4-7% anastomotic leaks (all in patients without diverting stoma), also abscesses, bleeding, sepsis

65% recurrence rate over median follow up of 104 months, that required steroids or immunosuppressive therapy. Two thirds of them limited to the colon

44% reoperation rate, after an average of 4.5 years.

Cummulative rate of recurrence after surgery was 30% and 55% after 5 and 10 years.

65% of the reoperations were segmental resections.

No good predictor of recurrence (including the presence of microscopic disease at the surgical margins, presence of granulomas, sex, colocolonic anastomosis or perianal disease). Young age is questionable.

Subtotal colectomy might offer a lower reoperation rate, but has a significant risk of leak from the ileorectal anastomosis and relatively poorer functional results.

Functional results at the end of the follow-up:

16% required permanent stoma.

75% had < 3 BM per day; 21% had nocturnal stools

89% had normal day and night continence

Fate of retained rectum

33 out of 47 patients developed disease (Lahey Clinic, 1992). Completion proctectomy performed in 24 patients (indications: severe disease, cancer, hemorrhage, perforation)

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