CROHN’S DISEASE
Stricturing phenotype
Drug treatment is better

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Falk Symposium 164, Budapest 2008
ECCO Consensus conferences
on Crohn’s disease (Gut 2006)
on Ulcerative colitis (JCC 1/2008)
on Opportunistic infections (Nice 2007)

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EPACT panel
University of Lausanne (2005, 2007)
Crohn’s disease
Cumulative Probability of Surgery

Crohn’s disease behavior

CD - Clinical Patterns

- Inflammation
- Fistulization
- Obstruction
- Microperforation (appendicitis-like)
The Vienna Classification of CD

Age at diagnosis
1. < 40 years
2. >= 40 years

Location
1. Terminal ileum
2. Colon
3. Ileocolon
4. Upper GI

Behavior
1. Non-stricturing non-penetrating
2. Stricturing
3. Penetrating

Gasche, Inflamm Bowel Dis 2000
The Montreal Classification of CD

Age at diagnosis
1. < 16 years
2. 17-40 years
3. > 40 years

Location
1. Ileal
2. Colonic
3. Ileocolonic
4. Upper GI

Behavior
1. Non-stricturing non-penetrating
2. Stricturing
3. Penetrating

p in front of B for perianal involvement

Silverberg M et al. Can J Gastroenterol 2005
Long-Term Evolution of Disease Behaviour in CD

Crohn’s disease
Fibrostenosis
M. Crohn
Stenosis of terminal ileum
Stenotic terminal ileum
Strictures in CD

- Long-standing inflammation
- May occur in any bowel segment
- Likely to recur, most often at anastomosis after bowel resection for stricture
- Usually silent until luminal caliber small enough to cause obstruction
Strictures in CD

- Fibrotic stricture
- Inflammatory stricture:
  "string sign" – acute manifestation of edema, active inflammation and spasm
- Strictures may harbor cancer !!!
Strictures in CD - symptoms

- Colicly abdominal pain
- Bloating
- Vomiting
- Punctuated by more severe episodes and culminating in complete obstruction
Obstruction in CD – 1st scenario

- Acute flare of CD – string sign, no significant prestenotic dilatation
- Blockage opens with medical therapy: antispasmodics, clear liquid diet, IV fluids, antiinflammatory therapy
- No need for urgent surgical intervention
CD treatment strategy
Extensive small bowel disease

- Systemic steroids + AZA/6-MP (or, if intolerant, MTX) + adjunctive nutritional support.
- Infliximab – if treatment fails and surgery is inappropritate.
Inflammatory stricture in CD – medical therapy

- Steroid test
- Infliximab:
  a) adjusted multivariate analyses of patients in ACCENT I trial and TREAT registry – drug does not increase the likelihood of stenosis
  b) case study 21 pts, 11 with inflammatory stenosis – 9 responded and became symptom-free after only one infusion, remission up to 18 months.
Obstruction in CD

- If obstruction does not open within 2-3 days of medical therapy:
  - foreign body
  - food bolus
  - fecalith - enterolith
  - cancer
  - fixed adhesive obstruction
Obstruction in CD – rule number 1.

- Never operate for acute obstruction!
- Exception: acute, severe, complete, strangulating, adhesive obstruction
Obstruction in CD – 2nd scenario

- Fixed fibrostenotic obstruction with chronic prestenotic dilation
- Chronic obstruction, repeated attacks of obstructive symptoms
- Patient afraid to eat, lose weight, severely impaired QOL
Obstruction in CD – 2nd scenario

- Problem is mechanical and requires mechanical solution.
- Do not attempt to manage medically and later send malnourished and debilitated patient to surgeon
Obstruction in CD – rule number 2.

- Always operate for chronic relapsing fixed obstruction!
- Surgeon’s decision for a specific procedure (stricturoplasty, resection) will depend on anatomy of each case.
Surgery and drugs

- **Prednisolone:**
  20 mg/day for >6 weeks is risk factor for surgical complications. Wean if possible.

- **Infliximab:**
  no evidence that surgery immediately following or in the medium term after infliximab has higher rate of postoperative complications.
  No defined optimal time span between treatment with infliximab and abdominal surgery.

- **Azathioprine**
  can be safely continued in perioperative period and beyond.
Recurrence of CD After Surgery

CD – high risk of postsurgical recurrence

- Severe lesion at endoscopy at 6-12 months (1,2)
- Preoperative disease activity (reflection is number of prior resections)
- Female gender, perianal disease, ileocolonic disease (3)
- Smoking
- Previous resection >1m
- End-to-end anastomosis (4)

Medical prophylaxis

- After small intestinal resection
- Start within 2 weeks of surgery
- Mesalazine >2g daily
  AZA/6MP first line in high risk patients
- Duration: at least 2 years.
- Quit smoking.