Children with Severe Ulcerative Colitis Deserve an Operation

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Traditional Treatment Pyramid

- Surgery
- Cyclosporine
- Infliximab
- Steroids (short-term)
- Azathioprine / 6MP (long-term)
- 5-ASAs e.g. mesalamine
- Probiotics, Antibiotics, Alternative therapies
Misconceptions

• The surgical treatment of ulcerative colitis represents a failure
  – i.e. Persist with medical treatment for as long as possible

• The operation is a horrible disfiguring nightmare

• Surgery is dangerous!
ULCERATIVE COLITIS

- Surgical indications in children
  - Failure of medical management
  - Complications of medical management
    - Growth Failure
  - Risks of medical therapy
- Rarely concern for cancer
ULCERATIVE COLITIS
ILEOANAL PULLTHROUGH

• THREE STAGE
  - ABDOMINAL COLECTOMY, ILEOSTOMY
  - COMPLETION COLECTOMY, POUCH
  - ILEOSTOMY CLOSURE

• TWO STAGE
  - COLECTOMY, PULLTHROUGH, ILEOSTOMY
  - ILEOSTOMY CLOSURE

• ONE STAGE
Technique

• Total abdominal colectomy
• J-pouch creation
• Completion Proctectomy
• Pull through
• +/- temporary ileostomy
• Laparoscopic approach
Outcomes Laproscopic vs Open IPAA

- Cochrane Analysis 2009 Utrecht
  - Review 11 trials
    - 607 pts – 253 (41%) laparoscopic
    - 1 prospective randomized trial
  - No differences

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Impact on Survival

• Mortality associated with medical therapy versus elective colectomy in ulcerative colitis: a cohort study.
  - 7541 medical therapy
  - 830 surgical therapy
  - Controlled for comorbid conditions

• Conclusion –
  - Elective colectomy associated with improved survival (in pts over 50)
Quality of Life

• Health-related quality of life and disability in patients with ulcerative colitis and proctocolectomy with ileoanal pouch versus treatment with anti-TNF agents.
  – 60 patients in remission with surgery or anti-TNF agents
  – Multiple QoL instruments

• Conclusion – No difference in quality of life measures
Cost

- Cost-effectiveness of early colectomy with ileal pouch-anal anastomosis versus standard medical therapy in severe ulcerative colitis
  - Markov model simulating 2 cohorts of 21 y/o pts
  - Cost
    - Medical - $236,370 per patient
    - Surgical $147,763 per patient
    - QALY – gained
      - Medical 20.78
      - Surgery 20.72
    - Resulting incremental cost-effectiveness ratio(Δcosts/ΔQALY) was approximately $1.5 million per QALY-gained
Healthcare costs have shifted from hospitalization and surgery towards anti-TNFα therapy: results from the COIN study

- 1315 CD patients / 937 UC
- Anti-TNFα use was the main costs driver, accounting for 64% and 31% of the total cost in CD and UC.
- Hospitalization and surgery together accounted for 19% and <1% of the healthcare costs in CD and 23% and 1% in UC, respectively.

CONCLUSIONS: Healthcare costs are mainly driven by medication costs, most importantly by anti-TNFα therapy. Hospitalization and surgery accounted only for a minor part of the healthcare costs.
Elective versus emergency surgery for ulcerative colitis: a NSQIP Analysis


- 4,962 Patients
  - 94% elective
  - 6% emergent

- Emergency cases were associated with a higher frequency of cardiac, pulmonary, and renal comorbidities; postoperative complications; longer hospital stays; and higher rates of return to the operating room.
Typical Post-op Patient
Results may Vary