Page | 179

## **Commentary**

# Surgical perspectives on inflammatory bowel disease

Every reputation-conscious surgeon is destined to, at least, one major embarrassment sometime in his career. For the gastrointestinal surgeon, inflammatory bowel disease (IBD) is a top contender. Ulcerative colitis (UC) and Crohn's disease (CD) are the general surgeon's stalkers. Even in those parts of the world where the prevalence of IBD is relatively common, diagnosis is not easy. Almost always a long history culminating in invasive procedures like endoscopy and biopsy precede diagnosis. The search for simpler diagnostic tests is ongoing. [11] Cumulative experience with IBD has resulted in improved outcomes of surgical treatment in North America and Western Europe.

The object of this commentary in this issue hinted

that Africans may not be immune from IBD. It could be surmised that more cases are waiting to be diagnosed. Unfamiliarity with IBD predisposes to delayed diagnosis and iatrogenic complications. Initial encounter with these patients early in the course of their disease is a luxury the surgeon does not share with his medical colleagues. Chronicity and complications would have taken their toll by the time the surgeon is summoned. Bleeding, sinuses, fistulas, strictures, obstruction, perforation, peritonitis, abscesses, and malignancy are time-dependent complications of IBD. Debility, dyselectrolytemia, anemia, and malnutrition are commonly present. Poverty and illiteracy are social dimensions that limit compliance with therapeutic options. Effects of antecedent drug therapy likeimmunosuppression (cyclosporine, infliximab, azathioprine, methotrexate, and mercaptopurine), impaired collagen synthesis (steroids), diarrhea, myelosuppression, and folatemalabsorption (aminosalicylates) make wounds susceptible to infection with poor healing capacity.<sup>[2,3]</sup>

The patient and relatives need to be educated about the disease in order to encourage cooperation with treatment and to assuage dissatisfaction from unrealistic expectations. It is vital that the physicians, surgeons, nurses, clinical nutritionists, and social workers play their roles as a team. [4] Balking and bravado have no place in clinical decision-making. Knowing what to do and doing the minimum necessary is a surgical maxim.

For UC, despite the frightening rectal blood loss, dehydration, dyselectrolytemia, and metabolic acidosis, it is inadvisable to rush to operate. Correction of these abnormalities will optimize the patient to withstand the additional insult of surgery and general anesthesia. Steroids in large doses, either as systemic therapy or by retention enema, bring about a cessation of bleeding in the majority of patients. Colonography or computer tomography using soluble contrasts like gastrografin as opposed to barium is advocated to avoid perforation of bowel. Colonoscopy should be avoided in the active phase of the disease. Careful flexible sigmoidoscopy may be tried to ascertain the state of the mucosa and the source of the bleeding.[5] Total colectomy, Hartmann's procedure, and ileostomy are options in emergency. Ileal pouch-anal anastomosis (IPAA) is formidable and is best done as an elective operation.

CD may present initially as anal fissure or fistula. Fissures occur about 90 and 10% of the time at 6 and 12 O'clock positions, respectively. They occur in patients with history of passage of hard feces, after vaginal delivery, or in those who practice anal sex or instrumentation. Fissures in other locations or in multiples should arouse suspicion of CD. Anal fistulas arising in childhood, are recurrent or complex, is also a harbinger of CD.

For emergent operations, itis advised to confine interventions to the minimum. Regardless of the type of complication, if laparotomy is indicated, chances are that the tissues have been altered from the virgin state. Edema, adhesions, strictures, vascularity and peritonitis, etc., all make it difficult to dissect safely along tissue planes. Relief of the obstruction, fecal diversion, and peritoneal decontamination may be all that is indicated in an emergent case. [6] The inflamed tissue vitiated by a long history and steroid therapy may not hold

sutures. Anastomosis becomes especially difficult and risky. Deciding what to take out and what to leave behind is difficult. Blind-loop syndrome may result from enteroenterostomy, with long loops leading to bacterial proliferation and malabsorption. Excessive sacrifice of bowel may result in short gut syndrome also with malabsorption of nutrients.

Where available and affordable, parenteral alimentation is a vital supplement for nutritional rehabilitation perioperatively or as long-term options. Management of gastrointestinal effluent will be a dominant challenge even with IPAA. Stoma therapy will require dedication from the patient and the nursing staff both during in-hospital phase of treatment and after discharge.

African practitioners can rise to the challenge of IBD through acquisition of tools, training, skills, and database to establish more surgical gastroenterology units. A goal to attract patients with relevant symptomatology, especially in the younger agegroup through referral from smaller hospitals and by dissemination of information through the mass media will enable clinicians to find these patients early in the course of their disease. As more cases are identified, the teaching of these subjects in medical schools will receive more emphasis in order to prepare the future general practitioners toidentify candidate patients for referral to bigger centers.

#### Robert B. Sanda

Department of Surgery, Drumheller Hospital, Drumheller AB, ToJ oY1, Canada

#### Correspondence to:

Robert B. Sanda, Department of Surgery, Drumheller Hospital, Drumheller AB, ToJ oY1, Canada. E-mail: robertsanda@yahoo.com

### References

- van Rheenen PF. Fecal Calprotectin for screening of patients with suspected inflammatory bowel disease: Diagnostic meta-analysis. BMJ 2010;341:3369.
- Whittle BJ, Varga C. New light on the anti-colic actions of therapeutic aminosalicylates: The role of hemeoxygenase. Pharmacol Rep 2010;62:548-56.
- Hanauer SB, Hommes DW. Inflammatory bowel disease. Expert Rev ClinImmunol 2010;6:499-500.
- Rajendran N, Kumar D. Role of diet in the management of inflammatory bowel disease. World J Gastroenterol 2010;16:1442-8.
- Koltun WA. Role of medical rescue therapy in the management of acute severe ulcerative colitis: The surgical perspective. Expert Rev GastroenterolHepatol 2009;3:325-7.
- Blum E, Katz JA. Postoperative therapy for Crohn's disease. Inflamm Bowel Dis 2009;15:463-72.

Page | 180