Deteriorating Severe Ulcerative Colitis?

*Stop and think!*

One of the nightmares in gastroenterology is the rapidly deteriorating patient with a severe attack of ulcerative colitis. The speed with which a patient can deteriorate can shock both physician and patient. The patient's family can only look on in horror as their loved one fades away with pouring bloody diarrhoea and sepsis.

In this situation every decision is critical and close observation of the patient essential.

**Initial Support**

The initial task is to stabilise the patient's clinical condition with intravenous fluids and electrolytes.

**Initial Diagnosis**

The second task is to confirm that the attack is due to ulcerative colitis. A more common cause of fulminating diarrhoea is an infective colitis. Common infections such as Shigella or Salmonella can also occur in patients with ulcerative colitis. While waiting for a stool culture immediate treatment with ciprofloxacin and metronidazole might be appropriate. An antigen test for *Clostridium difficile* must always be done. Patients with ulcerative colitis may also improve with fluid and antibiotics so regular review of the patient's progress is essential.

**Management of Severe Ulcerative Colitis**

Having stabilised the patient the attention turns to the underlying ulcerative colitis. There are two modalities to consider, medical or surgical therapy. Medical therapy uses drugs with varying degrees of toxicity; surgery is total colectomy and ileo-anal pouch creation. The first may settle the patient in hours, or, by delay, increase the risk of surgery. Unfortunately surgery has its own morbidity and mortality.

Medical decision-making does not consist merely of looking at the patient and the evidence and then making a decision. The evidence available is often not applicable to the individual case. Small differences in drug efficacies may be less clinically significant than local expertise and availability.

In addition, the fear of failure may influence the medical decision making. While the patient just wants the disease gone, the doctor is more concerned with the historically high mortality associated with fulminant ulcerative colitis. If on one hand the physician delays, the patient may be too sick for safe surgery to be performed. While on the other hand if the patient has a colectomy neither the physician nor the surgeon will be living with this mutilating but possibly life-saving procedure. In this situation the physician may take the easy way out and go with surgery before exhausting the medical options available.
The Medical Option

Even in 2020 many patients will be treated with high-dose corticosteroids. Fortunately in most patients this will bring the disease under control but relapse is inevitable and toxicity assured. Once the acute symptoms have subsided attention must be turned to maintenance therapy to prevent relapse. First line maintenance therapy will be an immunosuppressant such as azathioprine or methotrexate. This needs to be started urgently and carefully monitored to avoid side-effects.

Fortunately toxic corticosteroids are now being replaced with other safer drugs. Ideally all patients with acute severe ulcerative colitis should be treated with anti-TNF antibodies such as Revellex and Humira. Biosimilars (Generics) of these drugs are now available which is making them more affordable. They are however still too expensive to be available to everyone. This is a double tragedy as the state health system has limited resources and many of the lower medical aid plans do not cover these medicines which cost approximately R6000 a month. Just as effective in the short-term and somewhat cheaper is cyclosporine. Newer biological drugs are now available but these are viewed as second-line and generally more expensive.

The response rates to the anti-TNF antibodies is over 80% provided that the dose given is closely monitored with blood levels of the drug.

The Surgical Option

A colectomy needs to be performed when medical options have failed to control the disease process. With the changing availability of biological therapy and the ability to measure drug levels and the concomitant reduction in the use of corticosteroids less patients are facing the surgical option.

These ill patients are best managed by a medical gastroenterologist with a familiarity of the medical options available and experience in juggling the patient’s clinical state, dose of drug given and related drug levels in the blood. Access to a gastrointestinal surgeon with an interest in inflammatory bowel disease is a critical component of the management team.

While severe ulcerative colitis can be a frightening and serious disease most patients these days are successfully treated with medical therapy.