Nursing management of patients with severe ulcerative colitis


Summary
Ulcerative colitis is a relapsing chronic disease that has an unpredictable course. A relapse in the condition requires timely intervention and expert monitoring. A severe flare-up will often necessitate admission to hospital. This article provides an overview of the medical management of severe ulcerative colitis and the nursing interventions required.

Author
Mark Sephton, inflammatory bowel disease specialist nurse, Endoscopy Unit, University Hospital Aintree, Liverpool. Email: mark.sephton@aintree.nhs.uk

Keywords
Gastrointestinal disorders, incontinence, inflammatory bowel disease, ulcerative colitis

Aims and intended learning outcomes
This article aims to provide nurses with a comprehensive overview of the assessment and management of a patient presenting with a severe exacerbation of ulcerative colitis. After reading this article and completing the time out activities you should be able to:

› Provide an overview of ulcerative colitis, including the causes and treatments.
› Describe the assessment and relevant investigations required for a patient presenting with a severe flare-up of the condition.

Introduction
Ulcerative colitis and Crohn’s disease are classified under the umbrella term of inflammatory bowel disease (IBD). While both conditions are similar, in terms of symptoms and treatments, there are also many differences between the two. Clinical guidelines for IBD, including the management of severe ulcerative colitis, have been produced by the British Society of Gastroenterology (BSG) (Carter et al 2004). However, these guidelines have not been reviewed to take into account emerging evidence and to ensure that practice is up to date. More recently, the IBD Standards Working Group (2008) has developed service standards for patients with IBD.

An IBD nurse-led service has been shown to reduce the admission rate of patients with IBD by 20% (Nightingale et al 2000), and patients with the condition are generally more independent and mobile than other patients on the ward. These trends may reinforce a tendency to underestimate the severity of the disease. However, severe ulcerative colitis is potentially life-threatening and this patient group requires timely intervention and expert monitoring. Advances in medical therapy and expert surgical input have reduced the mortality rate to less than 1% (Truelove and Witts 1955).

Patients with severe ulcerative colitis who do not respond to intravenous corticosteroids
have the option of either second-line medical therapies such as ciclosporin or anti-TNF therapy, or colectomy. Where surgery is indicated, this should be done in a timely fashion. A delay in surgical intervention generally leads to poor patient outcomes. The UK IBD Audit in 2006 recorded 25 deaths that were directly linked to ulcerative colitis, with 15 of these cases involving patients who had undergone surgery (UK IBD Audit Steering Group 2007).

Overview of ulcerative colitis

Inflammation in ulcerative colitis affects the superficial mucosa layer of the colon (large intestine) (Figure 1). It almost always involves the rectum and extends in continuity along the colon, with a demarcation line occurring between the healthy areas and the inflamed areas. Ulcerative colitis is characterised by watery diarrhoea containing blood, mucus and pus in varying amounts. It is common for a diagnosis to be made in individuals between 15 and 45 years, with a second peak at 55-70 years (Royal College of Nursing (RCN) 2007). Ulcerative colitis is estimated to affect up to 120,000 people in the UK, equating to one in 500 people, and between 6,000 and 12,000 new cases are diagnosed every 12 months (National Association of Crohn’s and Colitis 2007).

Ulcerative colitis is classified by how far up the colon the disease extends (Figure 1). It may include (Carter et al 2004):

- Proctitis – confined to the rectum.
- Proctosigmoiditis – extends to the rectosigmoid junction.
- Left-sided colitis – extends to the splenic flexure.
- Extensive colitis – extends to the hepatic flexure.
- Pancolitis – extends from the rectum to the cecum and involves the entire colon.

Ulcerative colitis can generally be cured with surgery, but surgery carries a significant risk of morbidity. Therefore, medical management is in the patient’s best interest and is usually the preferred option. The exact aetiology of ulcerative colitis is unknown (Carter et al 2004) and consequently, treatment involves reducing inflammation of the colon wall and, frequently, suppression of the immune system (RCN 2007). Urgent bloody diarrhoea associated with abdominal pain is the most commonly cited symptom (Carter et al 2004). The condition can be complicated by infections such as Clostridium difficile toxin and toxic megacolon (where the colon becomes grossly dilated). This is a serious complication of ulcerative colitis, which may lead to bowel perforation, septicemia and even death.

Treatment of ulcerative colitis depends on the extent of involvement and disease severity. Standard treatment for mild to moderate ulcerative colitis involves the administration of 5-aminosalicylic acid (5-ASA) (Metcalf 2002). This can be administered orally and/or rectally depending on the extent of the disease. Therapy involving 5-ASA has been shown to reduce the risk of flare-ups; patients who do not adhere to their 5-ASA therapy regimens are at a fivefold greater risk of a flare-up of ulcerative colitis (Kane et al 2003). Patients with ulcerative colitis are at risk of developing colorectal cancer after ten to 15 years, depending on the extent of the disease. However, regular 5-ASA therapy reduces this risk (Velayos et al 2005).

Corticosteroids such as oral prednisolone can be used for patients who relapse or do not respond following optimisation of their 5-ASA therapy regimen. Some patients require immunosuppressive drugs such as azathioprine or 6-mercaptopurine when disease becomes steroid dependent or refractory (Chande et al 2007). Methotrexate is occasionally used in patients who fail to respond to azathioprine or 6-mercaptopurine, or who experience side effects. However, there is little robust evidence to support its use in ulcerative colitis, and its use could expose patients to side effects with little improvement in their disease (Chande et al 2007).
Surgery, involving the removal of the colon and rectum, is the principal cure for patients with severe ulcerative colitis. However, despite recent advances in minimally invasive surgical techniques, such as keyhole surgery, which offer additional benefits including reduced hospital stay and faster recovery, surgery is not well received by young and physically active patients (Becker and Stucchi 2009). The patient’s age and circumstances will dictate the procedure of choice. Non-hospitalised patients with chronic disease that has not responded well to medical management are considered for surgery.

Patients with pancolitis and ongoing disease activity have a 20-30% chance of undergoing colectomy (Carter et al 2004). This group of patients will usually undergo proctocolectomy (removal of the entire colon including the excision of the rectum) potentially with reconstructive surgery in the form of an ileal pouch-anal anastomosis (Figure 2).

For patients with severe ulcerative colitis, hospital admission may be required for the administration of intravenous corticosteroids, such as hydrocortisone or methylprednisolone. Patients who fail to respond to intravenous corticosteroids have the option of second-line medical therapy or surgery. Second-line therapy consists of either ciclosporin or anti-TNF therapy. Of patients presenting with acute severe colitis, 40% will respond well to intravenous corticosteroids, 30% will require colectomy and 30% will respond partially to intravenous corticosteroids (Jakobovits and Travis 2006). Management therefore requires careful patient assessment and a discussion about the benefits of commencing therapy such as ciclosporin or anti-TNF therapy, which should be weighed against the possibility of surgery (Jakobovits and Travis 2006).

Immunosuppressant therapies such as azathioprine or 6-mercaptopurine and methotrexate have no role in the treatment of severe ulcerative colitis at this time as they can take up to 12 weeks to provide therapeutic benefit. Patients should be sufficiently stable to consider prioritising second-line medical therapy over surgical intervention. Ciclosporin, a calcineurin inhibitor, is an immunosuppressant drug that inhibits T cell response by binding to an intercellular protein called immunophilins (Taylor et al 2004). This has a beneficial effect on the immune system of patients with ulcerative colitis by reducing inflammation in the colon wall. Alternatively, anti-TNF therapy is available. The only anti-TNF therapy licensed for use in patients with ulcerative colitis is infliximab, which works by recognising and binding to the protein tumour necrosis factor-alpha (TNF-α). High concentrations of TNF-α are found in the lining of the inflamed colon and are believed to be responsible for inflammation and ulceration in IBD. Binding and neutralising TNF-α in the wall of the colon can reduce the inflammation and relieve the symptoms of ulcerative colitis.
primary sclerosing cholangitis is closely associated with ulcerative colitis, with a prevalence of up to 6.2% in patients with extensive colitis (Terg et al 2008). Primary sclerosing cholangitis is a disease of the liver that destroys the entire network of variously sized ducts branching throughout the liver and prevents bile drainage, leading to liver failure in the long term (Broomé et al 1995).

Diagnosis and treatment is important because primary sclerosing cholangitis in ulcerative colitis increases the risks of colorectal cancer (Terg et al 2008).

Urea and electrolytes are not diagnostic of disease severity, but will indicate dehydration as a result of ongoing diarrhoea. Hypokalaeemia (low potassium) is common in patients experiencing diarrhoea and can be exacerbated further by the use of corticosteroids. Dehydration and hypokalaeemia should be corrected appropriately. If abdominal pain is a presenting complaint, then a pregnancy test should be performed on female patients. A number of medications used in ulcerative colitis, for example 5-ASA, azathioprine, 6-mercaptopurine and prednisolone, have the potential to cause pancreatitis, and therefore an amylase level may be a useful marker for pancreatitis; however, it is not conclusive.

A series of three stool cultures should be sent to the microbiology laboratory for microscopy, sensitivity and culture, and for C. difficile toxin testing. As there is only around 90% sensitivity to identifying C. difficile toxin in a stool culture (Fedorko et al 1999), it is good practice to send more than one stool culture to be tested.

Studies have shown that 5-20% of patients with an IBD flare-up will have their condition complicated by C. difficile toxin. Recent foreign travel and antibiotic use in the previous three months are relevant indicators when taking the patient’s history. However, a study in the United States showed that three quarters of cases of C. difficile toxin were community acquired and over half of these patients had not previously taken antibiotics, suggesting that C. difficile toxin is common in IBD (Issa et al 2007, Rodermann et al 2007). Gastroenteritis is generally self-limiting and does not require any antibiotics. However, it can precipitate a flare-up of ulcerative colitis.

Antibiotics are required to treat C. difficile toxin and include medications such as metronidazole or vancomycin. In cases of moderate to severe C. difficile toxin, it may be necessary to combine these drugs, depending on local hospital policy. Oral vancomycin should be prescribed as intravenous vancomycin is ineffective in C. difficile toxin and there is little evidence-based research for the routine administration of antibiotics. Empirical antibiotics (used to treat a broad range of
common organisms) should be given in the presence of toxic megacolon or perforation of the bowel to protect the individual against infection (Carter et al 2004). Current recommendations do not state that patients with severe ulcerative colitis require isolation, but this will depend on local hospital policy given the additional precautions being taken by hospital trusts to reduce *C. difficile* toxin infection rates.

A plain abdominal X-ray should be performed and reviewed within 24 hours of patient admission. Patients with evidence of toxic megacolon should be referred for an urgent surgical review. Toxic megacolon occurs when the transverse colon dilates to more than 5.5cm or the caecum dilates to more than 9cm. The bowel is then at risk of perforating and the patient may develop peritonitis (Carter et al 2004). It is reasonable to continue medical management for 48 hours if toxic megacolon is suspected and if the patient is sufficiently stable, but he or she should have daily abdominal X-rays. The patient should be reviewed daily by a gastroenterologist and a colorectal surgeon.

### BOX 1

**Modified Baron Score**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Normal mucosa.</td>
</tr>
<tr>
<td>1</td>
<td>Granular mucosa with an abnormal vascular pattern.</td>
</tr>
<tr>
<td>2</td>
<td>Friable mucosa.</td>
</tr>
<tr>
<td>3</td>
<td>Micro-ulceration of the mucosa with spontaneous bleeding.</td>
</tr>
<tr>
<td>4</td>
<td>Gross ulceration.</td>
</tr>
</tbody>
</table>


### TABLE 1

**Truelove and Witts’ (1955) disease activity score**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of bloody stools (per day)</td>
<td>&lt;4</td>
<td>4-6</td>
<td>&gt;6</td>
</tr>
<tr>
<td>Temperature (Celsius)</td>
<td>Afebrile</td>
<td>Intermediate</td>
<td>&gt;37.8</td>
</tr>
<tr>
<td>Heart rate (beats per minute)</td>
<td>Normal</td>
<td>Intermediate</td>
<td>&gt;90</td>
</tr>
<tr>
<td>Haemoglobin (g/dl)</td>
<td>&gt;11</td>
<td>10.5-11.0</td>
<td>&lt;10.5</td>
</tr>
<tr>
<td>Erythrocyte sedimentation rate (mm/hr)</td>
<td>&lt;20</td>
<td>20-30</td>
<td>&gt;30</td>
</tr>
</tbody>
</table>

(Truelove and Witts 1955)

(Jakobovits and Travis 2006). Where there is no evidence of toxic megacolon, there should be a low threshold for a repeat abdominal film if the patient’s condition deteriorates, to ensure the condition has not developed.

A rigid sigmoidoscopy should be performed where there is no immediate plan to perform a flexible sigmoidoscopy (Carter et al 2004), as this is the only way of assessing and grading the colonic mucosa. A flexible sigmoidoscopy is superior to a rigid sigmoidoscopy because it provides optimal views of the colonic mucosa. The procedure should be performed without giving the patient any bowel preparation, because this can exacerbate inflammation in the colon wall. Endoscopy scoring systems have been devised for the purposes of research, and these may be used by clinicians treating an exacerbation of ulcerative colitis. The modified Baron Score is an example of an endoscopy scoring system (Feagan et al 2005) (Box 1). The presence of pseudomembranes (yellow/whitish plaques that adhere to the colonic mucosa) on sigmoidoscopy can indicate *C. difficile* toxin and, in the absence of any local rectal medication such as 5-ASA or corticosteroids to account for rectal sparing (no inflammation in the rectum, but present in the colon) on sigmoidoscopy, then the preliminary diagnosis of severe ulcerative colitis should be questioned as infection often presents with rectal sparing (Jakobovits and Travis 2006).

Biopsies should be taken regardless of the grade of mucosal ulceration (Carter et al 2004) because this will also help to grade inflammation and rule out pseudomembranous colitis. It is possible to diagnose infective colitis on biopsy even when stool cultures are negative. The IBD Standards Working Group (2008) states that histology reports should be available within five days, but a system to report urgent samples within two days is also required.

Cytomegalovirus is particularly common in immunosuppressed patients and a test for the virus should also be requested on biopsy samples, as it is believed to account for 10% of corticosteroid failures (failure to respond to intravenous steroids because of viral infection) (Cottone et al 2001). Treatment of cytomegalovirus could prevent patients having to undergo colectomy (Cottone et al 2001).

There are a number of scoring systems available to classify disease activity, including those used in clinical trials. Truelove and Witts’ (1955) disease activity score has been used for more than 50 years (Table 1). If a severe flare-up of ulcerative colitis is suspected or confirmed, 400mg intravenous hydrocortisone divided into four doses, or 60mg methylprednisolone, should be administered each day (Carter et al 2004).
Prophylactic bone protection therapy should be co-prescribed with corticosteroids in the form of calcium and vitamin D3. If the patient is more than 65 years of age then treatment with a bisphosphonate is also recommended (BSG 2007). A bone mineral density scan should be arranged for patients under the age of 65 years who have been on corticosteroids for more than three months. This scan can diagnose osteoporosis, often referred to as thinning of the bones (Cluett 2003). The measurement of bone density is reported as a T score. A mean T score of minus 1.5 is evidence of reduced bone mineral density (osteopaenia) and the BSG (2007) guidelines recommend commencing such patients on bisphosphonate therapy.

A study by Bernstein et al (2001) showed that patients with IBD have a threefold increased risk of developing embolism. There are few situations where heparin is contraindicated; rectal bleeding is not one of them. A severe flare-up of ulcerative colitis can cause significant abdominal pain. Non-steroidal anti-inflammatory drugs should be avoided because they have been implicated in the exacerbation of ulcerative colitis, and their toxicity is not confined to the stomach or duodenum (Thiéfin and Beaugerie 2005). If an opioid analgesia is required in addition to paracetamol then one with a less potent effect on the motility of the gut, such as tramadol, should be used. Opioid analgesia and anti-diarrhoeal medication should be avoided as they increase the risk of colonic dilation, which may lead to possible perforation (Carter et al 2004).

Response to treatment
Patients should be monitored continuously for improvement or deterioration, and a formal review should take place on day three of treatment. Patients with a CRP greater than 45 mg/L (normal range is 0-10 mg/L), or still opening their bowels more than eight times per day (suggesting that the patient has not responded adequately to corticosteroid therapy), have an 85% chance of requiring an emergency colectomy during the same admission (Jakobovits and Travis 2006).

Patients who have responded well to intravenous hydrocortisone should be switched to 40mg oral prednisolone once a day (Carter et al 2004). An eight-week reducing course is often necessary because the colon becomes dependent on corticosteroid therapy and shorter courses often lead to an early relapse following withdrawal of this therapy.

Patients who do not respond to intravenous corticosteroids or relapse on switching to oral prednisolone should be reviewed by a colorectal surgeon. In collaboration with the patient, an assessment and decision should be made to implement second-line treatment in the form of ciclosporin or anti-TNF therapy (infliximab), or to undergo surgical intervention. The risks and benefits of treatment should be discussed and documented in the patient’s clinical notes, as anti-TNF and ciclosporin are powerful and potentially toxic drugs. This is important because data suggest that patients who fail to respond to corticosteroids have an 80% chance of requiring colectomy within ten years (Bojic et al 2005).

The long-term safety of these drugs is still not understood fully, and guidance from the National Institute for Health and Clinical Excellence (2008) recommends that infliximab should be used only in the treatment of patients with severe ulcerative colitis in whom ciclosporin is contraindicated or clinically inappropriate. A number of patients who respond to ciclosporin will relapse on discontinuation of this therapy; however, its use may allow other immunosuppressants that have a six to 12-week therapeutic benefit, such as azathioprine or 6-mercaptopurine, to take effect (Lichtiger 2009). Patients whose condition does not improve with either infliximab or ciclosporin should proceed with colectomy. Combined use of infliximab and ciclosporin is not recommended (Jakobovits and Travis 2006). Ciclosporin Traditionally ciclosporin was the first drug used if patients failed to respond to corticosteroid therapy; however, there has been a decline in its use because of its toxicity and poor data regarding its ability to prevent colectomy in the long term. Studies showing the same efficacy and reduced risk of toxicity in lower doses (de Saussure et al 2005, Durai and Hawthorne 2005) have been overshadowed by the introduction of infliximab. A possible reason for this could be that gastroenterologists have more experience in using infliximab (Jakobovits and Travis 2006). Ciclosporin is also not licensed for use in patients with ulcerative colitis, so it should only

NURSING STANDARD

Time out 2
A patient in your care requires a flexible-sigmoidoscopy. How would you explain the procedure to him or her? Think about the particular value it has in the management of severe ulcerative colitis.
learning zone *gastrointestinal nursing*

Be initiated by a consultant gastroenterologist. Before starting ciclosporin, the patient should have a negative stool culture result and there should be no evidence of sepsis. The ward pharmacist should review concurrent medication for interactions that could increase or decrease ciclosporin levels. Ciclosporin can be given orally or intravenously – there are no studies that have compared the efficacy of the different routes of administration. Starting doses, target blood levels and monitoring will vary from hospital to hospital.

The risks of side effects following intravenous administration of ciclosporin are higher than those when it is given orally. Patients should be observed for uncontrolled hypertension, hypomagnesium (low concentration of magnesium in the blood), hypolipidaemia (low cholesterol), seizures, and renal and liver impairment. Patients should continue intravenous corticosteroid therapy for a further seven days while receiving ciclosporin. Individuals should be observed for any signs of sepsis, according to local hospital policy, and antibiotics should be considered as prophylaxis against opportunistic infections. Patients who respond well to the treatment should continue taking oral ciclosporin for up to three months (Durai and Hawthorne 2005). **Infliximab** Patients about to commence infliximab should be able to provide a negative stool culture result and there should be no evidence of sepsis. Individuals should have a chest X-ray to screen for active or latent tuberculosis, as anti-TNF therapy has the potential to reactivate the disease. Patients with an abnormal chest X-ray should be referred to a respiratory physician (Rampton 2005). The focus on screening patients for hepatitis B has increased because anti-TNF has the potential to reactivate the condition (Esteve *et al* 2004).

Infliximab is not licensed for use in pregnancy, and women should be informed to use adequate contraception for at least six months after their last infusion (Schering-Plough 2009). However, there have been 300 post-marketing case reports suggesting that there are no adverse effects associated with the use of infliximab in pregnancy (Schering-Plough 2009). Breastfeeding is also not recommended while taking infliximab. A profile of the risks and benefits associated with the use of infliximab would need to be considered against the benefits of surgical intervention.

The starting dose of infliximab is 5mg/kg and it should be mixed in 250ml of 0.9% sodium chloride (Schering-Plough 2009). Infliximab should be administered intravenously over two hours via a low binding protein filter (Schering-Plough 2009). There have been no studies evaluating its stability when used with other drugs; therefore no other drugs should be administered through the same cannula. Adverse reactions were observed in approximately 60% of patients treated with infliximab and 40% of patients on placebo in clinical trials. Infusion-related reactions were the most common adverse reactions reported and included dyspnoea, urticaria and headaches (Schering-Plough 2009). Cases of anaphylactic-like reactions and seizures have been reported in post-marketing experience, but remain rare. If further induction doses are required, these should be administered at week two and week six (Schering-Plough 2009).

**Time out 3**

*How might the formation of a stoma affect a patient? Ask a stoma care nurse what support, information and advice is offered to patients with a stoma to enable them to continue with daily activities.*

**Surgery** If surgery is necessary and there is time, patients should be referred to a stoma care nurse beforehand so that they are given support, information and advice regarding stoma management. Stoma care services should also extend outside the hospital setting to ensure patients receive adequate follow-up support in the community. Stoma formation will have major implications for the patient, including how the individual will manage his or her daily activities and the effect it may have on body image (Younge and Norton 2007). Black (2004) suggested that patients experience psychological issues concerning altered body image and sexual activity as a result of stoma formation.

**Nursing interventions**

Nursing observations are vital in monitoring patients for improvement or deterioration in their condition. Patients should have their temperature, pulse, respiratory rate and blood pressure recorded. The frequency of monitoring will depend on the patient’s condition and local hospital policy; however, a minimum of four times a day is recommended (Carter *et al* 2004). Pyrexia and a rising tachycardia could be a warning sign of patient deterioration and the need for further medical review. Respiratory rate is also a useful indicator of deterioration.
Blood pressure tends to be the last parameter to become abnormal (Higgins et al 2008).

Completion of an early warning assessment tool, such as the modified early warning score (MEWS), should be performed and followed as per hospital policy. MEWS is a simple physiological scoring system that identifies medical patients at risk of deterioration in the clinical area, and helps to ensure that appropriate actions are taken (Subbe et al 2001). Recognising when a patient’s condition is deteriorating is a key aspect of patient safety. An early warning scoring system should be integral to nursing observations (Higgins et al 2008).

A stool chart can be used to measure improvement or deterioration in a patient’s condition. Depending on local hospital policy, the Bristol Stool Chart can be useful when describing the type of stool (Figure 3) (Lewis and Heaton 1997). Where possible, the patient should be involved in this process, because this encourages the individual to participate actively in his or her care.

Other documentation should be implemented and completed, including a food chart if there is concern regarding nutritional status and a fluid balance chart where intravenous fluid is administered, or where there is concern regarding fluid intake or urine output. Fluid balance charts are an important part of hydration monitoring (National Confidential Enquiry into Perioperative Death 1999).

The importance of ruling out infection has already been discussed, and the collection of a series of three stool cultures (one each day) should be performed and sent to a microbiology laboratory for microscopy, sensitivity and culture, as well as testing for C. difficile toxin, as soon as possible. Recent foreign travel and antibiotic use in the previous three months should be documented on the microbiology request form. A documented history of foreign travel will trigger additional tests to be performed by the laboratory (Thomas et al 2003). Where antibiotics have been prescribed, these should be given after the first stool has been collected, except in an emergency.

Patients should be referred to a dietician for nutritional therapy and support, and advised to commence a low residue/high protein diet. A low residue diet is similar to a low fibre diet, reducing stool frequency. All patients should be weighed (IBD Standards Working Group 2008). There is no evidence of a need for fasting in patients with severe ulcerative colitis unless bowel perforation is suspected or surgery is pending. Twice-weekly weight measurement will ensure that nutritional status is monitored for improvement or deterioration. Where there is an IBD specialist nurse in post, an early referral should be made so that the patient can be discussed and transferred to the care of a gastroenterologist within 24 hours of admission (IBD Standards Working Group 2008). The IBD specialist nurse can co-ordinate and provide advice to medical and nursing staff and offer support and advice to the patient.

Patients with a severe flare-up of ulcerative colitis generally require emotional support. Patients tend to lose time from work or education. They may become embarrassed because of the need to use the toilet frequently. The condition may also affect finances and relationships. Emotional support is vital and is an important aspect of holistic care provision (Metcalf 2007). The UK IBD Audit Steering Group (2007) highlighted that there were insufficient toilets in hospitals, with a median of 4.5 beds per toilet compared to a recommended three beds per toilet. This is a difficult problem to resolve, because it could involve extensive ward renovation. Therefore nurses should consider...
where, for example, they position patients with severe ulcerative colitis in relation to toilet facilities. Patients should be placed where they can be offered any additional priority or privacy.

Although not essential and no reference is made to blood glucose monitoring in the guidelines, random blood glucose monitoring will detect early symptoms of corticosteroid-induced diabetes.

If second-line medical therapy is implemented in the form of ciclosporin or infliximab, then additional nursing interventions will be required, depending on local hospital policy. Regular nursing observations, including temperature, pulse, respiratory rate and blood pressure should be recorded while administering infliximab infusions. Intravenous ciclosporin can cause uncontrolled hypertension, and nursing observations may need to be increased during administration of this therapy. Patients should be observed for delayed hypersensitivity reactions and will also need to be assessed for infection and seizures. Ciclosporin blood levels will need to be taken and dose adjustments made to avoid toxicity. This will require close communication between the medical staff and
the ward pharmacist. In addition, patients on ciclosporin should be advised to avoid whole grapefruit or grapefruit juice as this has a tendency to increase ciclosporin toxicity (Brunner et al 1998).

Conclusion

A severe flare-up of ulcerative colitis can be debilitating and even life-threatening for the patient. A good working knowledge of ulcerative colitis will allow the nurse to plan and implement essential care, thereby improving the patient’s quality of life NS

Time out 4

Using your knowledge and experience of ulcerative colitis, and having read this article, write up a care plan with a rationale for each nursing intervention for a patient who has been admitted to your area with a severe flare-up of ulcerative colitis.

Time out 5

Now that you have completed this article you might like to write a profile guide. Guidelines to help you are on page 60.


Lichtiger S (2009) Treatment of choice for acute severe steroid-refractory ulcerative colitis is ciclosporine. Inflammatory Bowel Diseases. 15, 1, 141-142.


Royal College of Nursing (2007) Role Descriptions for Inflammatory Bowel Disease Nurse Specialists. Royal College of Nursing, London.


