Medicine for Managers

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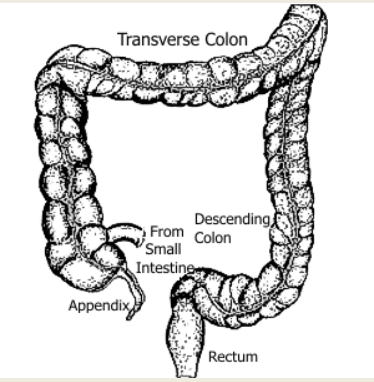
Ulcerative Colitis

Colitis is a term which means inflammation of the colon (itis = inflammation) but has come to be used to describe inflammatory changes anywhere in the lining (mucosa) of the large intestine (colon, caecum or rectum).

In general practice any patient presenting with bloody diarrhoea of more than three weeks' duration should be suspected of having colitis. However, ulcerative colitis (UC) may start more insidiously and bowel symptoms may include increased frequency of passing stool, loss of blood or mucus often in the form of bloody diarrhoea, colicky abdominal pain, urgency and tenesmus (the constant feeling of wanting the bowels open together with crampy lower abdominal pain). Other features may include nocturnal diarrhoea and weight loss. There may also be a family history of UC. The disease varies in severity. Mild disease is characterised by fewer than four bowel movements a day with pain, Moderate disease sufferers have four to six bowel movements a day, colicky pain and possibly anaemia and low grade fever. In severe disease patients may be very ill with at least six bloody stools a day, tenesmus, colicky pain, urgency, bloating and marked abdominal tenderness.



The disease may affect just the rectum (proctitis), the rectum and lower S-shaped part of the colon (proctosigmoiditis), the left side of the colon or anywhere throughout the large bowel (pancolitis).

Many UC sufferers may have other more general features of illness including mouth ulcers, inflammation of the eye, arthritis of joints and spine, skin changes and inflammation of the bile ducts in the liver. This is because the disease is believed to have an auto-immune

basis which results in systemic disease changes outside the large bowel.

Between 100-200 people per 100,000 have UC and the incidence is 10-20 per 100,000 per year. The peak incidence occurs between ages 10 and 40 but some 15% of new cases occur in patients over the age of 60. There is a genetic link with UC and 10-20% of sufferers have at least one other family member with some sort of inflammatory bowel disease.

Life expectancy for people with ulcerative colitis is the same as for the general population.

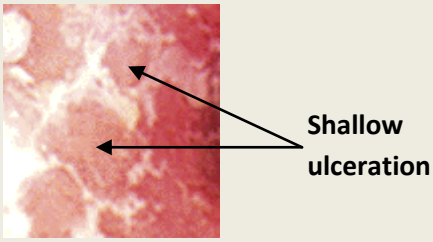
UC is characterised by periods of remission and periods of exacerbation. About half of all UC patients will relapse in any year and about 10% of sufferers will have a chronic continuous course. About a quarter of patients with pancolitis (the inflammatory change occurring throughout the large bowel) will undergo a colectomy (removal of affected colon) at an early stage of the disease.

The cause of ulcerative colitis is the $64,000 question! There is undoubtedly a genetic element to the disease and it appears that patients with a genetic susceptibility may develop the symptoms and signs in response to environmental triggers (that is that a particular genetic structure allows the body to be affected by something in the environment, e.g. a chemical or a bacterium etc.). The nature of the organisms in the gut may be related to the establishment of the disease and research has shown that bacteria which act on sulphur in some way may lead to symptom exacerbation. UC is is thought to be an auto-immune disease.

An auto-immune disease is one characterised by abnormal functioning of the body's immune system resulting in the production by the body of antibodies to its own tissues. In the case of UC it may be that the colonic bacteria are 'misread' by the body's immune system and the antibodies produced to them also attack the lining of the bowel itself by mistake. A majority of UC patients do have auto-antibodies which may be attacking their own bowel.

Curiously there is considerable evidence that smoking protects against ulcerative colitis. The risk of developing the disease is significantly lower in smokers than in non-smokers or former smokers. Stress and significant personal difficulties, on the other hand, are associated with flares-up of the disease. Drugs, such as non-steroidal anti-inflammatory drugs such as ibuprofen or diclofenac may cause flares-up in some people. Care must therefore be taken in patients who need such drugs that they are aware of the possible risks. Appendicectomy before the age of 20 reduces the risk of UC but does not influence the disease in patients in whom it is already established.

Ulcerative colitis is investigated by routine blood tests and stool cultures to exclude other



causes of the diarrhoea and then by sigmoidoscopy or colonoscopy with biopsy of the bowel lining to establish the diagnosis. The endoscope will visualise superficial ulceration and loss of the normal structure of the bowel and the biopsy will confirm inflammation, distortion of the lining and abscess formation.

Management of ulcerative colitis depends on the severity and the amount of the colon which is involved. If a toxic megacolon develops (an acute form of colonic distension where the colon is severely distended resulting in death of tissue, bleeding and perforation) this is an acute and life-threatening emergency which occurs in less than 5% of sufferers.

The use of medication is designed to induce remissions, followed by maintenance therapy to prevent relapse. There are a variety of medications as follows:

- 5- aminosalicylic acid derivatives such as sulfasalazine or mesalazine which are thought to exert an anti-inflammatory effect.
- Steroids such as prednisolone which are used short-term for their immunosuppressant and anti-inflammaotory properties
- Immunosuppressants such as azathioprine, and
- As a last resort, the drugs known as TNF (Tumour Necrosis Factor) such as infliximab and adalimumab are used when others have failed.

If medication fails surgery is indicated, particularly in severe disease, toxic megacolon or with persistent bleeding or perforation. In general the surgical removal of the affected part of the colon (colectomy) cures the disease. Sometimes, when the rectum is involved and surgery proves necessary it may be necessary to make a temporary or permanent colostomy (opening of the bowel to the outside).

There is an increased risk of colon cancer in patients with UC after ten years of activity. This risk does not appear to be present if the colitis affects only the rectum and anal area.

Having ulcerative colitis can be physically difficult and emotional disturbing. Stress reduction techniques are useful. The frequency of bowel movements can be very disruptive. Forward planning in respect of the location of toilets is important and spare changes of underwear can be a wise precaution.

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