Ulcerative Colitis (UC) is a chronic condition characterised by bloody diarrhoea and abdominal pain.

It is NOT related to IBS (which used to be called ?mucous colitis').

UC is an autoimmune condition. A similar disease called Crohn's disease may also cause colitic symptoms, but Crohn's can affect the whole gut from mouth to anus, whereas UC only tends to affect the colon. Also, Crohn's tends to affect the whole thickness of the gut wall, rather than just the lining (mucosa).

The term Inflammatory bowel disease (IBD) encompasses both UC and Crohn's.

UC and Crohn's both affect young people, generally in second and third decades of life.

UC is thought to arise as part of the body's reaction to a viral infection.

Recently there has been some controversy linking Crohn's with measles vaccination, but there is no hard evidence of this as yet.

People with UC have demonstrable abnormalities in their immune system, but it is unclear as to whether this is the cause or effect of the condition. Both UC and Crohn's may present with abdominal pain and bloody diarrhoea.

Other symptoms may include:

- Fatigue.
- Weight loss.
- Loss of appetite.
- Rectal bleeding.
- Loss of body fluids and nutrients.

Approximately half the UC patients have mild symptoms.

Other problems include:

- frequent fever,
- nausea
- severe abdominal cramps
- arthritis,
- inflammation of the eye,
- liver disease (fatty liver, hepatitis, cirrhosis, and primary sclerosing cholangitis),
- osteoporosis,
- skin rashes,
- anaemia,
- kidney stones

Crohn's may present in a similar way, but can be distinguished on examination if there are signs of sores in the anal area, including skin tags mimicking hemorrhoids, fissures (cracks), fistulas (abnormal openings connecting the bowel to the skin surface near the anus), and abscesses.

Also, the history tends to feature more predominantly: loss of appetite and weight, joint pains, and fever, which are common early signs; the

patient tends to be more systemically unwell. If not, it may require tests such as barium X-rays to determine whether the IBD is UC or Crohn's.

Acute attacks of either UC or Crohn's may present with dehydration due to the considerable fluid loss form frequent bouts of diarrhoea. Blood loss may cause anaemia.

Severe attacks of inflammation can cause severe abdominal pain, which may not be immediately recognised as IBD if this is the initial presentation of the condition.

Symptoms may fluctuate with episodes of ?flare-up' interspersed with periods of remission.

UC is associated with a higher risk of bowel cancer than that of the general population. About 5% of people with UC develop colon cancer.

The risk of cancer increases with the duration and the extent of involvement of the colon. For example, if only the lower colon and rectum are involved, the risk of cancer is not higher than normal.

- In the US, 1997 guidelines on screening for colon cancer suggest that people who have had IBD throughout their colon for at least 8 years and those who have had IBD in only the left colon for at least 15 years should have a colonoscopy every 1 to 2 years to check for dysplasia. Such screening has not been proven to reduce the risk of colon cancer, but it may help identify cancer early should it develop.

TESTS:

Blood count to determine anaemia and to detect inflammation
(raised white cell count)

ESR to detect inflammation

Colonoscopy to visualise the bowel. (+/- biopsy)

Barium studies of upper and lower GI tract

TREATMENT:

Patients with UC vary considerably in the course the disease takes. They need regular follow-up but may only require intermittent drug therapy for the bouts of symptoms.

Some people find that certain food trigger an attack and they are able to identify the culprits and avoid them.

Drug Therapy

The commonest type are called 5-ASA agents, e.g. sulfasalazine. Possible

side effects include nausea, vomiting, heartburn, diarrhea, and headache.

People with severe disease and those who do not respond to 5-ASA preparations may be treated with corticosteroids such as Prednisone and hydrocortisone given orally, intravenously, through an enema, or in a suppository, depending on the location of the inflammation.

Corticosteroids can cause side effects such as weight gain, acne, facial hair, thinning of the skin and easy bruising, osteoporosis, hypertension, mood swings, and increased risk of infection, so patients need to be carefully monitored.

Other drugs may be given to treat the symptoms by relaxing the patient or to relieve pain, diarrhoea, or infection.

Occasionally, symptoms are severe enough that the person must be hospitalized: severe bleeding or severe diarrhea that causes dehydration.

This may necessitate ?resting' the gut for a few days and feeding the patient via an intravenous drip.

Surgery: between 25 and 40% of ulcerative colitis patients must eventually have their colons removed because of massive bleeding, severe illness, rupture of the colon, or risk of cancer.

Sometimes the doctor will recommend removing the colon if medical treatment fails or if the side effects of corticosteroids or other drugs threaten the patient's health.

Crohn's disease. There are several groups of drugs that are the mainstay of therapy:

1. Aminosalicylates: aspirin-like drugs, which include sulfasalazine and mesalamine, given both orally and rectally.
2. Corticosteroids: prednisone and methylprednisolone, available orally and rectally.
3. Immune modifiers: azathioprine, 6MP, methotrexate.
4. Antibiotics: metronidazole, ampicillin, ciprofloxacin, and others.

Surgery becomes necessary in Crohn's disease when medication can no longer control the symptoms, or when there is an intestinal obstruction or other complication.

In most cases, the diseased segment of bowel is removed and the two ends of healthy bowel are joined together. This is called *resection* and *anastomosis,* and it may allow many symptom-free years, but is not a cure because the disease frequently recurs at or near the site of anastomosis.

LIFESTYLE MEASURES:

Although smokers appear to have a lower risk of UC (for unknown reasons) and nicotine patches have been used (experimentally) to induce remission, this treatment is ineffective in preventing relapses and Crohn's disease is exacerbated by smoking.

Alcohol intake should be restricted (see below)

NUTRITIONAL APPROACH:

Dietary changes: high intake of sugar or fat may be linked with IBD (studies show mixed results on this). Food allergies were first suggested as a factor some 50 years ago, and since then nutritionally oriented doctors have observed a reduction of UC severity if allergenic foods are avoided.

Nevertheless, this link remains controversial.

Nutrition is an important aspect of IBD, the nutritional status of the individual impacting on IBD and vice versa.

In 1997, a paper in the journal *Current Opinion in Gastroenterology* suggested that fish oils and glutamine have a beneficial effect on gut inflammation.

Fish oil has been tested as a potential remedy for UC, a four-month study showing that people with UC who were given fish oil (containing 3.2 g EPA and 2.2 g DHA: the two most important fatty acids in fish oil) required lower levels of prescription anti-inflammatory drugs.

Fish oil has also been found in another study to reduce the need for steroid medication to combat intestinal inflammation.

Folic acid has been found to prevent experimentally induced colon cancer in animals, and it may be of benefit in humans who have UC, to reduce the risk of colon cancer secondary to the UC.

Ingestion of alcohol, which is known to cause folate deficiency, is linked with an increased incidence of colon cancer. Therefore individuals with UC should restrict their alcohol intake as far as possible.

HERBAL REMEDIES:

Important note: herbs can interact with prescribed and OTC medication: always check with your doctor or pharmacist before using them.

There are a number of traditionally anti-inflammatory herbs, many of which can be effective either taken by mouth or as an enema. (however, enemas should be avoided during flare-ups).

- Aloe vera: the juice has been used for people with UC
- Licorice: a traditional remedy
- Chamomile: strong tea taken 3 times a day may be beneficial and has been used in Germany by doctors using herbal medicine.
- Flaxseed
- Calendula
- Marshmallow
- Myrrh
- St.John's Wort: NB this herb has been found to adversely impact on various prescribed medicines: always check with your doctor.
- Yarrow