Microscopic Colitis :

- **Collagenous Colitis**
- **Lymphocytic Colitis**

What is Microscopic Colitis?

Microscopic Colitis (MC) is the term used to cover two types of bowel inflammation that affect the colon (large bowel) called Collagenous Colitis and Lymphocytic Colitis. Both these conditions cause watery diarrhoea. MC is classified as a type of Inflammatory Bowel Disease (IBD), but is different from and not usually as severe as the better known types of IBD, Crohn's Disease and Ulcerative colitis (UC). However, MC appears to be more common than was previously believed, but this may simply be due to greater awareness and better diagnosis of the condition.

MC gets its name because the large bowel lining looks normal or nearly normal to the naked eye during colonoscopy (a test to look inside your large bowel) and normal on x-ray examination and can only be seen when tissue samples are taken from the colon and examined under the microscope.

What is the difference between Collagenous and Lymphocytic Colitis?

There is not much difference between Collagenous Colitis and Lymphocytic Colitis and they tend to have the same symptoms.

Collagenous Colitis (CC) is the term used when a thickened band of tissue made of a protein, called collagen, often together with an increased number of white blood cells called lymphocytes, are found just beneath the lining of the colon. Lymphocytes are part of the body's defence system to fight infection and disease. The condition was first described in 1976 by a Swedish pathologist, Dr CG Lindstrom.

A few years later Dr NW Read described a similar type of colitis, which came to be called Lymphocytic Colitis (LC) by Dr AJ Lazenby. It is similar to CC having a large number of lymphocytes, but there is no continuous band of thickened collagen.

There has been some debate about whether these two conditions are individual diseases or two stages of one disease. There have been several cases where over time the diagnosis has changed from one to the other.

How does Microscopic Colitis affect the working of the colon?

When the colon becomes inflamed with MC it becomes less efficient at absorbing the liquid from the stools, resulting in a larger volume of watery stools. At the same time the inflamed colon cannot hold as much waste as normal, leading to more frequent bowel actions.

What are the symptoms of Microscopic Colitis?

The main symptom of MC is chronic (ongoing), watery diarrhoea, which may begin very suddenly. Urgency and fatigue are also common. Unlike in Ulcerative Colitis, there is no bleeding, as there is no ulceration.

Symptoms range from mild to very severe, sometimes with very frequent and explosive diarrhoea. Some people recover spontaneously and continue to keep well, while for others the condition comes and goes.

Can Microscopic Colitis develop into Ulcerative Colitis or Crohn's Disease?

A few cases have been reported of Microscopic Colitis developing into UC or Crohn's. However, some researchers believe that this may be due to misdiagnosis in the first place. There can be similarities between the features of each condition and thorough tests are necessary to make the right diagnosis.

How is Microscopic Colitis diagnosed?

A diagnosis is usually made by having a colonoscopy. This test is performed by an endoscopist, who inserts a colonoscope through the anus, which allows them to look directly at the lining of the colon. A colonoscope is a long flexible tube about the thickness of your index finger, with a bright light at the end. It is long enough to examine the whole colon. MC can sometimes be diagnosed by flexible sigmoidoscopy. This test is similar, but as the scope only reaches the lower part of the colon, a diagnosis may be missed if just the upper colon is affected.

During either test the specialist will painlessly remove small pieces of tissue from the lining of the colon to examine in the laboratory. These tissue samples are called biopsies. It may be necessary to take several biopsies throughout the colon, as the condition tends to be patchy and may occur on the right side of the colon furthest from the rectum.

What causes Microscopic Colitis?

Like other forms of IBD it is not known what causes MC. There have only been a few studies looking into its causes and the results have been variable.

Some scientists believe MC may result from an autoimmune response, which means that the body's immune system destroys healthy cells for no known reason. This idea is supported by reports of up to 50% of people with MC also having other so-called auto-immune diseases, including coeliac disease, rheumatoid arthritis, thyroid disorders and diabetes.

It has also been suggested that there is a link to hormones. This theory comes from the fact that there are a higher number of women with CC and reports that symptoms stop with pregnancy.

In some cases of MC certain drugs have been suspected as a trigger, most commonly non-steroidal anti-inflammatory drugs (NSAIDs such as diclofenac and ibuprofen). Other drugs suggested, though more rarely, include aspirin, ticlopidine, carbamazepine and proton pump inhibitors (such as lansoprazole).

Other ideas include a reaction to bile salts, to bacteria in the gut or to an infection, such as Clostridium difficile. It may be that there is not one single cause, but a combination of several that set off an inflammatory response.

Who gets Microscopic Colitis?

Recent European studies have found that MC is found in approximately 1 person in 10,000. It was thought that MC mainly affected middle aged to elderly women. While a recent review of studies on Microscopic Colitis has found there were a greater number of women with Collagenous Colitis, it has shown no significant difference between men and women with Lymphocytic Colitis. The typical age of diagnosis was found to be between 60 and 70 years, though some cases of older and younger people, including children, have been reported. There are several reports of a family history of MC, but as the numbers are small it is not yet clear whether it can be inherited.

Is there a risk of cancer?

There is no evidence that having Microscopic Colitis increases your risk of getting colon cancer. Researchers believe you have the same risk as that of the general population.

How is Microscopic Colitis treated?

The treatment of MC will depend upon the severity of symptoms. While some people find symptoms stop without treatment, most people have ongoing or occasional diarrhoea. Unfortunately, as with UC and Crohn's, there is no cure at present.

The first aim of treatment is to eliminate any other factors that could be contributing to the diarrhoea. It is important therefore that you have investigations for other conditions that can exist with MC, which include coeliac disease, diabetes and thyroid disease. If you are taking NSAIDs, such as ibuprofen, then it would be best to talk to your doctor about stopping or decreasing the medication, as these drugs may worsen MC. If you are taking any other drugs mentioned previously as a possible cause of MC, such as lansoprazole, then it would be a good idea to discuss with your doctor whether to change your medication.

In mild cases anti-diarrhoeal drugs such as loperamide (Imodium) may be effective, though high doses may be needed. Bismuth subsalicylate (Pepto Bismol) has been found to give long-lasting benefit to many people with MC. However, some people find it unpleasant as it is only available as a liquid to be taken in large doses for up to 8 weeks; also being an over-the-counter drug, it is not available on prescription. Colestyramine (Questran) can also be very effective, but again some people find it difficult to take because of the taste and texture.

If these anti-diarrhoeal drugs are not effective, there are a number of other drugs available which are the same as those used to treat the two main IBD conditions of UC and Crohn's. However, one of these, the anti-inflammatory drug, mesalazine (Asacol, Pentasa) has been found in a number of studies to be effective in only 50% of patients. Corticosteroids, in particular budesonide (Entocort), have been among the most effective drugs, but symptoms often return after stopping the medication. In this case, immunomodulators such as azathioprine (Imuran) may be tried. Other drugs that have been used include antibiotics (such as metronidazole), octreotide, methotrexate and ciclosporin. Full details of drugs (except octreotide which is a growth hormone) can be found in the NACC booklet *Drugs Used in IBD*.

Very rarely surgery may be an option, but it is hardly ever required nowadays with the use of more effective medication. Surgery may be a temporary ileostomy where the contents of the intestines are diverted to give the inflamed colon a chance to heal. To do this, the ileum (the lower end of the small intestine) is brought out through the wall of the abdomen as a stoma (or ileostomy), to empty into a bag. The idea of such an operation is to close the stoma after a period of time once the colon has recovered sufficiently. If, very rarely, permanent surgery is recommended the operation may be for a permanent ileostomy or an ileal pouch-anal anastomosis. Details of these operations can be found in the NACC booklet *Surgery for Ulcerative Colitis*.

Is a special diet helpful?

There is limited evidence on foods that may affect people with Microscopic Colitis. Some people tolerate any foods, while others find certain ones make their symptoms worse. Some studies suggest it may be a good idea to cut down on caffeine, alcohol, dairy products and artificial sweeteners, such as sorbitol, to improve symptoms.

What about alternative and complementary approaches?

Some people try alternative or complementary treatments to help improve their symptoms. You can find some suggestions in NACC's FAQ *Managing Diarrhoea*, but NACC always recommends that you consult your doctor before trying any alternative treatment.

There is very little reliable research on alternative products. However, a recent Danish study found that probiotic treatment reduced bowel frequency by more than 50% in six out of 21 people with Collagenous Colitis. There has been previous research into the use of probiotics for IBD, which looks promising for mild to moderate cases, but studies have been small and further research is needed.

Further information

NACC hopes that the information contained in this Information Sheet has proved helpful. If you have any further questions you may wish to telephone our **Information Line**: **0845 130 2233**. Or you might like to speak with a volunteer in our **NACC-in-Contact** supportive listening service: **0845 130 3344** (national line, at local call rates from most telephones).

The National Association for Colitis and Crohn's Disease (NACC) is a voluntary Association, established in 1979, which has 30,000 members and 70 Groups throughout the United Kingdom. The Association also provides a supportive listening service called NACC-in-Contact which is available to anyone affected by Inflammatory Bowel Disease.

Membership of the Association costs £12 for the first year and £10 subsequently. Additional donations to help the work of the Association are always welcomed.

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