Microscopic Colitis

Introduction
Microscopic Colitis is an inflammatory bowel disease that affects the large bowel (colon and rectum). There are two main forms of Microscopic Colitis – Lymphocytic Colitis and Collagenous Colitis. These are very similar conditions and are commonly referred to under the single name ‘Microscopic Colitis’.

Microscopic Colitis has different symptoms from those of the better known inflammatory bowel diseases Ulcerative Colitis (UC) and Crohn’s Disease. In UC and Crohn’s the lining of the bowel is often visibly inflamed and ulcerated when viewed through a colonoscope (an instrument which allows a specialist to look at the inside of the colon). In Microscopic Colitis, the appearance of the bowel lining is usually normal to the naked eye when viewed through a colonoscope. However, when biopsies (tissue samples) are taken from the bowel lining and viewed under a microscope changes to the bowel lining can be seen - hence the name Microscopic Colitis. Also, a typical symptom of UC and Crohn’s is bloody diarrhoea. In Microscopic Colitis the diarrhoea is watery and does not contain blood.

This information sheet provides information about Microscopic Colitis, including diagnosis, possible causes, and treatments.

What are Lymphocytic and Collagenous Colitis?
Microscopic Colitis includes Lymphocytic Colitis and Collagenous Colitis. These conditions are very similar and tend to cause the same symptoms. However, there are some differences.

In Lymphocytic Colitis there is an increased number of lymphocytes (white blood cells) within the lining of the colon. Lymphocytes are part of the body’s defence system to fight infection and disease.

In Collagenous Colitis, the lining of the colon develops a thicker than normal layer of a protein called collagen. There may also be an increased number of lymphocytes in the lining of the colon.

There has been some debate about whether these two conditions are individual diseases or two stages of one disease, but there has been no final consensus.

How does Microscopic Colitis affect the digestive system?
Microscopic Colitis affects the large bowel (the last part of the digestive system), which includes the colon and rectum. The large bowel absorbs water from left over waste and stores faeces (stools) before they pass out of the body through the anus in a bowel movement.
When the colon becomes inflamed with Microscopic Colitis, it becomes less efficient at absorbing the liquid from the waste. Chemical imbalances in the digestive system can also lead to yet more fluid in the colon. This means you will have a larger volume of watery stools, and, as a result, diarrhoea.

What are the symptoms of Microscopic Colitis?
The main symptom of Microscopic Colitis is chronic (ongoing) watery diarrhoea, which may begin very suddenly and occur during the day or night. Some people may have explosive diarrhoea. If the diarrhoea is severe you may become dehydrated. Unlike in Ulcerative Colitis, you will not get any bleeding, because the lining of the bowel is not ulcerated.

Other symptoms may include abdominal pain or discomfort, incontinence, weight loss, fatigue, bloating and wind. (See our Bloating and Wind information sheet for suggestions on how to cope with this).

Who gets Microscopic Colitis?
Microscopic Colitis is typically first diagnosed in people aged 50-60, but may begin at any age. Studies have shown that a quarter of people with Microscopic Colitis are diagnosed before the age of 45, and it has been found in children under the age of 12. While Lymphocytic Colitis affects men and women in about the same numbers, Collagenous Colitis is more common in women.

There have been some reports of a family history of Microscopic Colitis, but it is not yet clear whether there is a genetic predisposition.

It is estimated that about 2-3 people out of every 10,000 may develop Microscopic Colitis each year. It is thought that the number of people with Microscopic Colitis is increasing, but this may be due to growing awareness of the condition and more investigations of older people with chronic diarrhoea. Also, people initially diagnosed with other conditions, such as Irritable Bowel Syndrome (IBS), are sometimes later found to have Microscopic Colitis.

What causes Microscopic Colitis?
We do not know what causes Microscopic Colitis, but studies suggest that there are likely to be a number of different factors.

Some scientists believe Microscopic Colitis may be an autoimmune response where the body's immune system attacks healthy cells for no known reason. This idea is supported by reports that up to 4 in 10 people with Microscopic Colitis also have other autoimmune diseases, such as coeliac disease, rheumatoid arthritis, thyroid disorders and diabetes.

A review of research into Microscopic Colitis has suggested that certain drugs may trigger the condition. The drugs most commonly associated with Microscopic Colitis include:

- non-steroidal anti-inflammatory drugs (NSAIDs)
- aspirin
- some proton pump inhibitors (PPIs) used to reduce stomach acid, such as lansoprazole and omeprazole
- acarbose for diabetes
- ranitidine for indigestion and heartburn
- ticlopidine for blood conditions
- sertraline, an anti-depressant
- some statins.

However, not all studies of these drugs have found a link with Microscopic Colitis. Also, the situation is further complicated by the fact that many of these drugs are known to cause diarrhoea as a side effect. If you are taking any of these medications, it is important not to stop taking them until you have talked to your doctor.

Other possible causes of Microscopic Colitis 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.

Several recent studies have also shown a link between cigarette smoking and Microscopic Colitis. In this research the smokers with Microscopic Colitis were found to have developed the disease more than a decade earlier than the non-smokers with Microscopic Colitis.

**How is Microscopic Colitis diagnosed?**
Microscopic Colitis is diagnosed by using a microscope to examine biopsies (tissue samples) taken from the lining of the colon during a colonoscopy. In a colonoscopy, a specialist doctor or nurse inserts a colonoscope through the anus. A colonoscope is a long flexible tube about the thickness of your little finger, with a bright light and camera at the end, which allows the specialist to look directly at the lining of the colon. The colonoscope is long enough to look at the whole colon. Sometimes the specialist will carry out a similar test, a flexible sigmoidoscopy, which uses a shorter scope. However, as this type of scope only reaches the lower part of the colon, this test may not find Microscopic Colitis that could be further along the colon.

During either test the specialist will remove small pieces of tissue from the lining of the colon to examine in the laboratory under a microscope. It may be necessary to take several biopsies as Microscopic Colitis tends to be patchy. A diagnosis may be missed if appropriate biopsies are not taken.

**Can Microscopic Colitis develop into Crohn’s Disease or Ulcerative Colitis?**
The risk of Microscopic Colitis developing into Crohn’s or UC appears to be very small. Although a few cases have been reported in the past, the number is very low, so it could just be a chance association. It may also be that the UC or Crohn’s was mistakenly thought to be Microscopic Colitis when first diagnosed. There can be similarities between the features of each condition and thorough tests are necessary to make the right diagnosis. For further information about various tests, see our booklet: *Investigations for IBD.*

There is no evidence that having Microscopic Colitis increases your risk of getting colon cancer. One study even suggests that people with Microscopic Colitis have a lower risk of developing bowel cancer.

**How is Microscopic Colitis treated?**
Some people find their symptoms stop without treatment. However, many people have ongoing or occasional diarrhoea. While there is no cure at present for the condition, treatment can often relieve these symptoms.

An important first step is to eliminate any other factors that could be contributing to the diarrhoea. Your doctor may recommend that you have investigations for other conditions that have similar symptoms, such as coeliac disease, diabetes, and thyroid disease. If you are taking any of the drugs mentioned previously as a possible trigger of Microscopic Colitis, such as NSAID drugs or aspirin, then you may be asked to change or decrease this medication. It may also be worth exploring whether anything in your diet, for example dairy products or caffeine, could be making your diarrhoea worse.

**Will I need to take any medications?**
If none of the steps mentioned above has relieved your symptoms, you may need to take medication for your Microscopic Colitis.

For mild symptoms, anti-diarrhoeal drugs such as loperamide (Imodium) may be effective.

Budesonide, a steroid, currently appears to be the most effective treatment for more severe Microscopic Colitis. This is a form of steroid which has fewer side effects than some other steroids, but may still cause problems such as osteoporosis with long term use.
Other drugs that have been used to treat Microscopic Colitis include cholestyramine, bismuth subsalicylate, antibiotics (such as metronidazole), mesalazine, immunosuppressants (such as azathioprine and methotrexate) and biologics (such as infliximab and adalimumab).

You can find more details on these drugs in our booklet: Drugs Used in IBD.

Will I need surgery?
The development of more effective medication means that surgery is very rarely required for Microscopic Colitis. For details of the operations that may be recommended, see our information sheet Surgery for Ulcerative Colitis.

Will it help to change my diet?
There is limited evidence on foods that may affect people with Microscopic Colitis. Generally, the best thing to do is to eat a nutritious and balanced diet to maintain your weight and strength, and to take sufficient fluids to stop you getting dehydrated. However, you may find that certain foods affect your symptoms. It could help to cut down on foods which can induce diarrhoea. Some people have found that spicy or fatty foods, soft drinks, or foods containing caffeine make diarrhoea worse. Avoiding milk products may help if you are lactose intolerant (an inability to digest and absorb a sugar found in milk). It is also possible to buy dairy products with the lactose removed. However, it is important to get advice from your doctor or a qualified dietician before making any changes to your diet. For more information on healthy eating, see our booklet: Food and IBD.

What about alternative and complementary approaches?
Some people have tried alternative or complementary treatments to help improve their symptoms. Examples include Boswellia Serrata Extract and peppermint oil. Others have found probiotics helpful. However, very little research has been done in this area, and there is little evidence to suggest these treatments have real benefit.

Will I recover?
The outlook for people with Microscopic Colitis is generally good. Symptoms tend to improve with time and for many people they resolve completely. Others may continue to have flare-ups but Microscopic Colitis seldom leads to serious complications or surgery.

Further help
Crohn’s and Colitis UK Information Line: 0845 130 2233, open Monday to Friday, 10 am to 1 pm, excluding English bank holidays. An answer phone and call back service operates outside these hours. You can also contact the service by email info@crohnsandcolitis.org.uk or letter (addressed to our St Albans office). Trained Information Officers provide callers with clear and balanced information on a wide range of issues relating to IBD.

Crohn’s and Colitis Support: 0845 130 3344, open Monday to Friday, 1 pm to 3.30 pm and 6.30 pm to 9 pm, excluding English bank holidays. This is a confidential, supportive listening service, which is provided by trained volunteers and is available to anyone affected by IBD. These volunteers are skilled in providing emotional support to anyone who needs a safe place to talk about living with IBD.

All our information sheets and booklets are available free from our office – call or email the Information Line. You can also download them from our website: www.crohnsandcolitis.org.uk
Crohn’s and Colitis UK publications are research based and produced in consultation with patients, medical advisers and other health or associated professionals. They are prepared as general information on a subject with suggestions on how to manage particular situations, but they are not intended to replace specific advice from your own doctor or any other professional. Crohn’s and Colitis UK does not endorse or recommend any products mentioned.

We hope that you have found the information helpful and relevant. We welcome any comments from readers, or suggestions for improvements. References or details of the research on which this publication is based and details of any conflicts of interest can be obtained from Crohn’s and Colitis UK at the address below. Please send your comments to Glenys Davies at Crohn’s and Colitis UK, 4 Beaumont House, Sutton Road, St Albans, Herts AL1 5HH, or email glenys.davies@crohnsandcolitis.org.uk

Crohn’s and Colitis UK is the working name for the National Association for Colitis and Crohn’s Disease (NACC). NACC is a voluntary Association, established in 1979, which has 30,000 members and 70 Groups throughout the United Kingdom.

Membership of the Association costs £15 a year. There are discounted rates for students and over 65s. New members who are on lower incomes due to their health or employment circumstances may join at a lower rate. Additional donations to help our work are always welcome.