CROHN'S & COLITIS UK

FIGHTING INFLAMMATORY BOWEL DISEASE **TOGETHER**

INFORMATION SHEET

MICROSCOPIC COLITIS

INTRODUCTION

Microscopic Colitis is an inflammatory bowel disease that affects the large bowel (colon and rectum) and was first recognised by doctors 40 years ago. 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 Disease, the lining of the bowel is often visibly inflamed and ulcerated when viewed during colonoscopy (an instrument which allows a specialist to look into the colon). In Microscopic Colitis, the bowel lining usually appears normal during colonoscopy.

However, when biopsies (tissue samples) are taken from the bowel lining and examined under a microscope, changes in the lining can be seen – hence the name Microscopic Colitis. Another difference is that a frequent symptom of UC, and sometimes Crohn's Disease, is bloody diarrhoea. In Microscopic Colitis, the diarrhoea is watery but usually does not contain blood. The long term outlook for sufferers of Microscopic Colitis is good with a recent study showing that more than three out of four people achieve long term remission from the condition.

This information sheet provides a brief overview of 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.

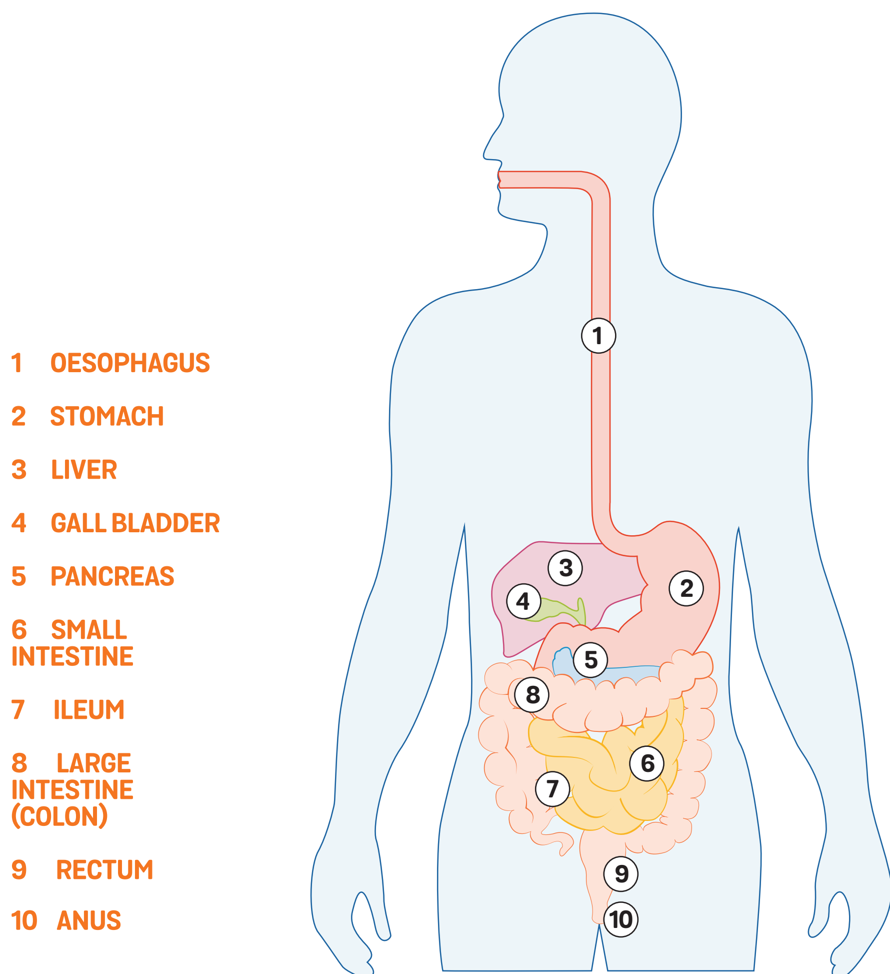
In **Lymphocytic Colitis**, there is an increased number of lymphocytes (white blood cells that are part of the body's defence system for fighting infections) within the lining of the colon.

In **Collagenous Colitis**, a thicker than normal layer of a protein called collagen develops in the lining of the colon and there may also be increased numbers of lymphocytes. In both cases the increase in lymphocytes is a sign of inflammation.

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 the rectum. The healthy large bowel absorbs around 90% of the water from left-over waste and create solid bowel movements. When the colon is inflamed due to Microscopic Colitis, it becomes less efficient at absorbing liquid from the waste. Chemical imbalances in the digestive system can also occur causing yet more fluid to build-up in the colon. This leads to a large volume of watery stools and diarrhoea.

THE DIGESTIVE SYSTEM



My symptoms include explosive diarrhoea, stomach cramps and tiredness. I have also lost a lot of weight.

Lyn, age 57
diagnosed with Collagenous Colitis in 2014

WHAT ARE THE SYMPTOMS OF MICROSCOPIC COLITIS?

The main symptom of Microscopic Colitis is chronic (ongoing) watery diarrhoea, which may begin very suddenly. Some people may have explosive diarrhoea. If the diarrhoea is severe, dehydration may occur. In contrast to UC and Crohn's Disease, bleeding from the bowel is unlikely, because the lining of the bowel is not ulcerated. Other symptoms include:

- abdominal pain (cramping or dull),
- weight loss,
- fatigue (which may be caused by night-time diarrhoea),
- faecal incontinence,
- joint and muscle pain,
- bloating and wind.

See our information sheets: **Fatigue and IBD**, and **Managing Bloating and Wind**, for suggestions on how to cope with some of these symptoms.

Symptoms may be misdiagnosed as Irritable Bowel Syndrome (IBS). One study found around one in 20 people diagnosed with irritable bowel were then found to have Microscopic Colitis.

WHO GETS MICROSCOPIC COLITIS?

Studies suggest that, each year, out of 100,000 people, between one and 11 of them will develop Collagenous Colitis and between two and 19 will develop Lymphocytic Colitis. 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 intensive investigations of older people with chronic diarrhoea. Microscopic Colitis is most commonly diagnosed in people in their 60's, although the condition may begin at any age. Around one quarter of people are diagnosed before the age of 45 years old, and although rare, Microscopic Colitis has also been found in children.

Both Lymphocytic Colitis and Collagenous Colitis affect more women than men, although the gender differences are greater for Collagenous Colitis. There are reports of Microscopic Colitis affecting a number of members of the same family, and studies suggesting certain genes predispose people to developing the condition. Recent studies have suggested Microscopic Colitis is more common among people of Jewish descent and that it affects more people living in northern countries.

WHAT CAUSES MICROSCOPIC COLITIS?

The cause of Microscopic Colitis is unknown, but studies suggest there is not one single cause, but a combination of several, setting off an inflammatory response.

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 people with Microscopic Colitis having a greater number of other autoimmune conditions, than the general population. There are reports that up to four in 10 people with Microscopic Colitis have other autoimmune diseases, such as coeliac disease, rheumatoid arthritis, thyroid disorders and type 1 diabetes, and evidence of abnormal immune responses.

The role of bacteria in the development of Microscopic Colitis is unclear. Some studies have suggested people infected by the bacteria Clostridium difficile and Yersinia enterocolitica are more likely to develop Microscopic Colitis.

Research suggests certain drugs may trigger Microscopic Colitis. The drugs most commonly associated with Microscopic Colitis include:

- non-steroidal anti-inflammatory drugs (NSAIDs, including ibuprofen and diclofenac),
- some proton pump inhibitors (PPIs, including omeprazole and lansoprazole) used to reduce stomach acid,
- selective serotonin reuptake inhibitors (for depression),
- aspirin,
- acarbose for diabetes,
- ranitidine for indigestion and heart burn,
- ticlopidine for blood conditions,
- statins (for cholesterol control).

However, not all studies have found a link between Microscopic Colitis and these drugs. Also, the situation is further complicated by the fact many of these drugs are known to cause diarrhoea as a side effect. For this reason, your IBD team will assess all the drugs that you have taken before starting treatment for Microscopic Colitis. If you are taking any of these medications, it is important not to stop taking them until you have talked to your doctor or IBD team.

Several recent studies have demonstrated links between cigarette smoking and Microscopic Colitis, with one study showing a three fold increased risk in current smokers and a two fold increased risk in past smokers. On average, smokers develop Microscopic Colitis 10 - 14 years earlier than non-smokers.

HOW IS MICROSCOPIC COLITIS DIAGNOSED?

Microscopic Colitis is diagnosed using a microscope to examine biopsies (tissue samples) taken from the lining of the colon during a colonoscopy. In a colonoscopy, a long flexible tube (about the thickness of your little finger) with a bright light and camera at its tip is inserted through the anus, allowing the specialist to examine the lining of the colon. During the investigation, the specialist will painlessly remove small pieces of tissue from the lining of the colon, to examine in the laboratory under a microscope.

Your specialist may also do blood tests to rule out coeliac disease (an allergy to gluten). Studies show that people with Microscopic Colitis are 50 times more likely to have coeliac disease than the general population. For further information about these tests, see our information sheet: **Tests and Investigations for IBD**.

> “I was diagnosed by a biopsy taken during a colonoscopy. This followed 6 months of unexplained weight loss, persistent frequent diarrhoea and abdominal pain.”
>
> Michaela, age 51
> diagnosed with Lymphocytic Colitis in 2015

CAN MICROSCOPIC COLITIS DEVELOP INTO CROHN'S DISEASE OR ULCERATIVE COLITIS?

The risk of Microscopic Colitis developing into Crohn's Disease or UC appears to be very small. Although a few cases have been reported, the number is very low, so it could just be a chance association. It might also be that UC or Crohn's Disease was mistakenly thought to be Microscopic Colitis when first diagnosed. There are similarities between the features of each condition and thorough tests are necessary to reach the correct diagnosis.

There is no evidence Microscopic Colitis increases your risk of developing colon cancer. Some studies suggest people with Microscopic Colitis have a lower risk of developing bowel cancer than people who do not have the condition.

HOW IS MICROSCOPIC COLITIS TREATED?

There is little guidance on how to manage Microscopic Colitis. Over one third of people with Microscopic Colitis find that their symptoms stop without the need for treatment. An important first step is to eliminate factors that could be contributing to diarrhoea. If you are taking any of the drugs mentioned previously as possible triggers for Microscopic Colitis, then you may be asked to change or decrease the medication. It is also worth exploring whether any lifestyle factors, such as smoking, alcohol, caffeine and dairy products, could be making your diarrhoea worse. Your doctor might also recommend that you have investigations to rule out other conditions with similar symptoms, such as coeliac disease or bile acid malabsorption, and to detect problems with your thyroid (a gland in your neck which makes hormones).

WILL I NEED TO TAKE ANY MEDICATION?

If none of the steps mentioned above has improved your symptoms, you might need to take medication for your Microscopic Colitis. The main goal of treatment is to achieve clinical remission (freedom from symptoms) and improve quality of life. While more drug studies have been undertaken in Collagenous Colitis than Lymphocytic Colitis, it is generally felt there is no need to treat these conditions differently.

For people with mild Microscopic Colitis, anti-diarrhoeal drugs, such as loperamide (Imodium®) or diphenoxylate (Lomotil®), can be sufficient. Although not studied in formal trials, clinical experience shows they improve symptoms, including stool frequency.

For people with more severe Microscopic Colitis, the steroid drug budesonide (Entocort® or Budenofalk®) currently appears to be the most effective treatment.

However, although budesonide is effective at achieving clinical remission, two out of three people started on treatment relapse (flare-up) once treatment is discontinued. Some guidelines have suggested treatment should be stopped after two months to identify the third of patients who will not require longer treatment. This allows anyone who relapses to continue on maintenance treatment with budesonide.

The latest studies of maintenance treatment with budesonide suggest low doses are effective. Using a low dose is important, because despite budesonide having fewer side effects than other steroids (due to its local effect and it being more efficiently broken down by the liver), it can still cause problems. Bone loss, for example, while reduced with budesonide, is not completely eliminated.

In comparison to budesonide, other steroids, such as prednisolone, have a more limited role in Microscopic Colitis. Some experts use prednisolone when budesonide is not suitable. In one study, prednisolone was shown to be both less effective than budesonide for the treatment of Microscopic Colitis and to have more side effects.

ARE THERE OTHER DRUGS WHICH CAN BE USED IN MICROSCOPIC COLITIS?

Around one in eight people with severe Microscopic Colitis do not respond to budesonide, leading to the need for alternative treatments. In general, less research has been undertaken into these other drugs, which include:

- **Colestryramine**

Colestyramine (Questran), a drug binding bile acids, may help Microscopic Colitis by removing bile acids that contribute to inflammation. This can be particularly helpful for people who have additional problems with bile acid absorption.

- **Azathioprine**

In small studies azathioprine (or mercaptopurine) brought on remission in Microscopic Colitis and reduced the need for steroids. But another study suggested long term use in Microscopic Colitis may lead to patients developing intolerance and having to stop treatment.

- **Biologics**

Anti-TNF drugs, which target proteins in the body involved with inflammation, may help Microscopic Colitis. Although there have been no formal trials of biologics in this condition, reports of individual patients suggest infliximab (Remicade, Inflectra®, Remsima ®) and Adalimumab (Humira ®) help to reduce symptoms.

- **Octreocide**

Other drugs studied in Microscopic Colitis include octreotide and verapamil, but neither of these showed consistent benefits. However, some guidelines suggest octreotide may help people with severe watery diarrhoea who have failed to improve with other treatments.

WILL I NEED SURGERY?

While older publications have reported surgical approaches can successfully treat severe Microscopic Colitis, the development of more effective medications means surgery is now rarely required. For details of the operations that might be recommended, see our information sheet: **Surgery for Ulcerative Colitis**.

> After many years of experimenting, I have found dairy products seem to trigger my symptoms, so I have replaced milk with soya or almond milk instead.
>
> Lyn, age 57
> diagnosed with Collagenous Colitis in 2014

WOULD IT HELP TO CHANGE MY DIET?

There is only 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 becoming dehydrated. It may also help to reduce your intake of caffeine and artificial sugars as they are known to draw fluid into the bowel that may aggravate diarrhoea. You could also consider avoiding milk products as it may be possible that intolerance to lactose in milk might be making your diarrhoea worse. However, before making any changes to your diet it is important to get advice from your doctor or a dietitian. For more information on healthy eating see our booklet: **Food and IBD**.

WHAT ABOUT ALTERNATIVE AND COMPLEMENTARY APPROACHES?

While some people have tried alternative or complementary treatments to improve their symptoms, limited research has been undertaken to test whether these approaches are effective. Although one small study suggested Boswellia serrata improved symptoms there have been concerns about variations in the numerous products available. This situation has led to some guidelines not recommending Boswellia serrata.

Probiotics, (such as Lactobacillus acidophilus, Bifido-bacterium animalis, and lactis strains) are no more effective than placebo (dummy) treatments, and are not recommended by guidelines. It is important to discuss any alternative or complementary approaches you may be considering with your IBD team before starting treatment.

WILL I RECOVER?

The outlook for people with Microscopic Colitis is generally good. Four out of five can expect to be fully recovered within three years, with some even recovering without treatment. However, for those who experience persistent or recurrent diarrhoea, long term budesonide may be necessary. Some people may still have symptoms such as abdominal pain, fatigue and joint pain, even when in remission from the diarrhoea. Your doctor will be able to advise you how to minimise these symptoms, and although Microscopic Colitis may continue to affect quality of life, it rarely leads to serious complications or surgery.

HELP AND SUPPORT FROM CROHN'S AND COLITIS UK

You can download all our information sheets and booklets from our website: **www.crohnsandcolitis.org.uk**. You can also request them free of charge from our office – call or email the Information Service.

Crohn's and Colitis UK Information Service: Our helpline is a confidential service providing information and support to anyone affected by Crohn's Disease, Ulcerative Colitis and other forms of Inflammatory Bowel Disease (IBD).

Our team can:
- help you understand more about IBD, diagnosis and treatment options
- provide information to help you to live well with your condition
- help you understand and access disability benefits
- be there to listen if you need someone to talk to
- put you in touch with a trained support volunteer who has personal experience of IBD

Call us on **0300 222 5700*** or email **info@crohnsandcolitis.org.uk**

Monday, Tuesday, Wednesday and Friday – 9 am to 5 pm
Thursday – 9 am to 1 pm

*Calls to this number are charged at a standard landline rate or may be free if you have an inclusive minutes' package. Calls may be recorded for monitoring and evaluation purposes.

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Microscopic Colitis Edition 4
Last review: November 2016
Next planned review: 2019

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ABOUT CROHN'S & COLITIS UK

We are a national charity established in 1979. Our aim is to improve life for anyone affected by Inflammatory Bowel Diseases. We have over 28,000 members and 50 local groups throughout the UK. Membership costs start from £15 per year with concessionary rates for anyone experiencing financial hardship or on a low income.

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