

Dr Maxton Pitcher (GMC no. 3284212)
MA MD (Cantab) BMBCh (Oxon) FRCP
Consultant Gastroenterologist

Harrow Gastro



You Are Here: [Harrow Gastro](#) > Medicines For The Gut

[Home](#)

[Contacts & Appointments](#)

[Private Endoscopy Services](#)

[Tests & Specialist Treatments](#)

[Digestive Problems](#)

[Conditions Treated](#)

[Patient Information Leaflets](#)

[Biography](#)

[Fees & Payments](#)

[Feedback & Testimonials](#)

[Terms & Conditions](#)

[Links](#)

[NHS Patients](#)



St Mark's Hospital

Bile Acid Malabsorption and Diarrhoea

Chronic bile acid malabsorption (BAM) affects an estimated one in 100 people in the UK and it can cause sufferers to have up to ten watery bowel movements a day and sometimes in the night, often for months at a time. This bile acid diarrhoea can have a big impact on their lives at home or at work and while they are travelling, as they always need to be near a toilet. The condition is often unrecognized by doctors and

many sufferers are not diagnosed, often being presumed to have diarrhoea-predominant irritable bowel syndrome (IBS-D). Symptoms of bloating are common but abdominal pain is not usually a feature of the condition. Standard blood tests and colonoscopy are normal, without a definitive cause being identified, and so exclusion of BAM requires further investigation. Evidence suggests that as many as half a million patients in the NHS who are receiving current treatment for IBS-D actually have BAM, for which more effective treatment is available.

Mechanism

Bile acid is produced by enzymes in the liver, to help the body digest fats and fat-soluble vitamins. Its production is controlled by a hormone called Fibroblast Growth Factor 19 (FGF19). Over 90% of the bile acid is absorbed from the intestine (terminal ileum) back into the blood and is then reused. In healthy people, when bile acid is absorbed by the intestine, the body makes more FGF19 to stop new bile acid from being produced and so only relatively small quantities are lost from the body.

Only recently have we begun to understand exactly what causes bile acid diarrhoea. This type of diarrhoea occurs when an overload of bile acid reaches the large intestine (colon) and causes excess water to be secreted into the bowel. Bile acid diarrhoea is caused by the body producing too much bile acid, because of a deficiency in FGF19, which normally switches off bile acid production. People with bile acid diarrhoea make less FGF19, so the hormone 'switch' fails to stop the liver from producing more bile acid than the body needs. Because of this, more is produced than the intestine can absorb. Excess bile acid then irritates the colon and the resulting watery secretion causes diarrhoea.

Diagnosis

A capsule containing an artificial bile acid called SeHCAT (75Se-homocholeic acid taurine) is swallowed by the patient in the hospital Nuclear Medicine department. A body scan is performed using a gamma camera to determine the starting amount in the body and involves only a very limited amount of radiation exposure. A second scan is performed after a week to measure how much has been retained. This is called the SeHCAT test which accurately measures loss of bile acids from the body. A retention value of <10% is considered abnormal and indicative of bile acid malabsorption.

Treatment

Treatments that can remove bile acid from the colon (bile acid sequestrants) can alleviate the symptoms and improve quality of life of sufferers of this condition. Colestyramine (Questran) and Colestipol have been used for over 40 years in the treatment of high cholesterol and are powdery resins which are effective in controlling bile acid diarrhoea. Some patients find them unpalatable due to their texture and taste. Too high a dose can cause constipation and so it is important to experiment with the dose, titrating it to the symptoms to determine what is best tolerated. Sometimes, just half a 4g sachet a day of colestyramine can be sufficient to control the diarrhoea. A newer bile acid sequestrant is now available in tablet form called Colesevelam, but is currently unlicensed for treating bile acid diarrhoea and currently GPs are unlikely to prescribe it. An effective dose is 1.25-3.75g per day, best taken at bedtime and is generally well tolerated. An 80% response

rate is to be expected.

New hormone-based treatments could be developed in the future to treat the condition and doctors could potentially test people's hormone levels to diagnose it. Watch this space!

Dr Maxton Pitcher, December 2012

© 2015 www.harrowgastro.co.uk - Designed by [Oldroyd Publishing Group Ltd.](#) All Rights Reserved