



**University
Hospitals Sussex**
NHS Foundation Trust

Bile salt diarrhoea

Patient information

What is bile salt diarrhoea?

Bile salt diarrhoea is sometimes called bile salt malabsorption or bile acid malabsorption. These terms mean the same thing. In this leaflet it is called bile salt diarrhoea.

Bile salts are made in the liver, and help to you to digest your food, particularly fat, as it travels through your small bowel. The bile salts are released from your liver and gallbladder when you eat a meal, and enter your small intestine. When they reach the last part of your small bowel, otherwise known as the 'terminal ileum', the bile salts should be reabsorbed and recycled back to your liver.

If the bile salts are not reabsorbed in the ileum, they continue on in your gut into the colon, where they draw a lot of water into the bowel, creating ongoing problems with diarrhoea.

Why do I have bile salt diarrhoea?

There are different reasons that people get bile salt diarrhoea, and they have been grouped into three types:

Type 1: problems with your small intestine or ileum. For example, it has been surgically removed following Crohn's disease or cancer treatment, or it has become inflamed.

Type 2: there is no obvious cause or reason for the bile salt diarrhoea, and your small intestine looks normal. This is called idiopathic or primary bile acid diarrhoea and is by far the commonest type.

Type 3: other diseases or problems with your gut, for example coeliac disease, pancreatitis, removal of your gallbladder, after radiation therapy, or peptic ulcer surgery.

What are the symptoms of bile salt diarrhoea?

People with bile salt diarrhoea generally find that they need to go to the toilet urgently, often after eating, with watery, pale stools (poo). They often have abdominal pains (cramps in the tummy) and badsmelling wind.

Bile salt diarrhoea can severely affect your quality of life. Some people find they have bouts of diarrhoea more than 10 times a day and are nervous about going out if they are too far from a toilet. The diarrhoea may have been going on for a long time. Some people find that they start losing weight because of the diarrhoea.

Because Vitamin B12 is also absorbed in the same part of the bowel (terminal ileum) people with bile salt diarrhoea can also suffer from not having enough Vitamin B12 and it is important to get your vitamin B12 level checked with a simple blood test.

How is bile salt diarrhoea treated?

Treatment of any underlying condition, such as coeliac disease or Crohn's disease will help the bile salt diarrhoea.

All types of bile salt diarrhoea will be helped by sticking to a low fat diet, and in mild cases, this may be all that is needed to help ease the symptoms.

Tips for a low-fat diet:

- A low-fat diet is less than 40g of fat a day.
- This means you can only have 3 teaspoons of butter / spread or cooking oil a day.
- Avoid frying and try to grill, boil, steam, microwave or dry roast food instead.
- Choose lean meat, removing fat or skin and use lower fat dairy products (for example: semi-skimmed or skimmed milk, low fat cheeses and fat-free deserts and yoghurt).
- Your doctor can refer you to a dietician if you need support with this.

In moderate / severe bile salt diarrhoea, it is likely that you will also benefit from taking medication that binds the bile salts in your gut, preventing them from drawing in water to the colon to stop the diarrhoea. These medications are called bile acid sequestrants.

There are 2 types of bile acid sequestrants available:

- **Colestyramine (Questran) or Colestipol (Colestid)**

These medicines come as powder and need to be mixed up with liquid before they are taken. Some people find the texture or taste unpleasant. If this is a problem for you, then try adding the powder to fruit smoothies, juice or sauce, or even to a pudding or custard. Mixing well and refrigerating the mixture can also help.

The main side effect of these medications is constipation, which generally just means that you have taken more than you needed. Since it will take a few (up to 10) days for the maximum effect of these medicines to be achieved, start with a low dose and increase this slowly. Some people will only need one sachet every other day to get rid of the diarrhoea, but more commonly 2 or more sachets a day will be required. The maximum number of sachets which you can take per day is nine.

Because these medicines can interfere with the absorption of other medicines, it is advised that you take it at least one hour before, or four hours after other medicines. Taking it with lunch or an evening meal often works well, but if you are on a lot of other medications, you may need to work out a new schedule for your medicines - your GP or pharmacist will be able to help you with this.

- **Colesevelam (Cholestagel)**

If you are not able to tolerate the powder medications despite the above measures, then this is a tablet alternative.

Colesevelam is newer, much more expensive and unlicensed for bile salt diarrhoea, which is why you should try the sachet medicines first. Again, constipation is the main side effect and the dose should be increased slowly, to avoid this. One tablet every other day may be enough, but most people need one or two tablets a day. The maximum dose is 7 tablets per day.

Colesevelam can also interfere with the absorption of other medicines and it is advised that you take it four hours apart from other medicines (before or after). Taking it at lunchtime often works well, but if you take other medicines at this time then talk to your GP or pharmacist about how to fit these medicines in.

What are the risks of bile salt sequestrants?

Bile salt sequestrants can interfere with the way in which your body absorbs fat soluble vitamins (vitamins A, D, E & K).

We would recommend that if you are taking bile salt sequestrants regularly, you should also take a multi-vitamin and consider a specific Vitamin D supplement.

Can I take any other diarrhoea remedies?

Simple anti-diarrhoea medicine such as Loperamide (Immodium) may help ease your symptoms by slowing down the activity in your bowel. Some people find that these work just as well as the bile salt sequestrants, and they can be used instead of, or as well as, these medicines.

Resources:

corecharity.org.uk

choices.nhs.uk

nice.org.uk

nutrition.org.uk

**This leaflet is intended for patients receiving care
in Brighton & Hove or Haywards Heath**

Ref. number: 1024.1
Publication date: 11/2021
Review date: 11/2024

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