



Abdominal adhesions

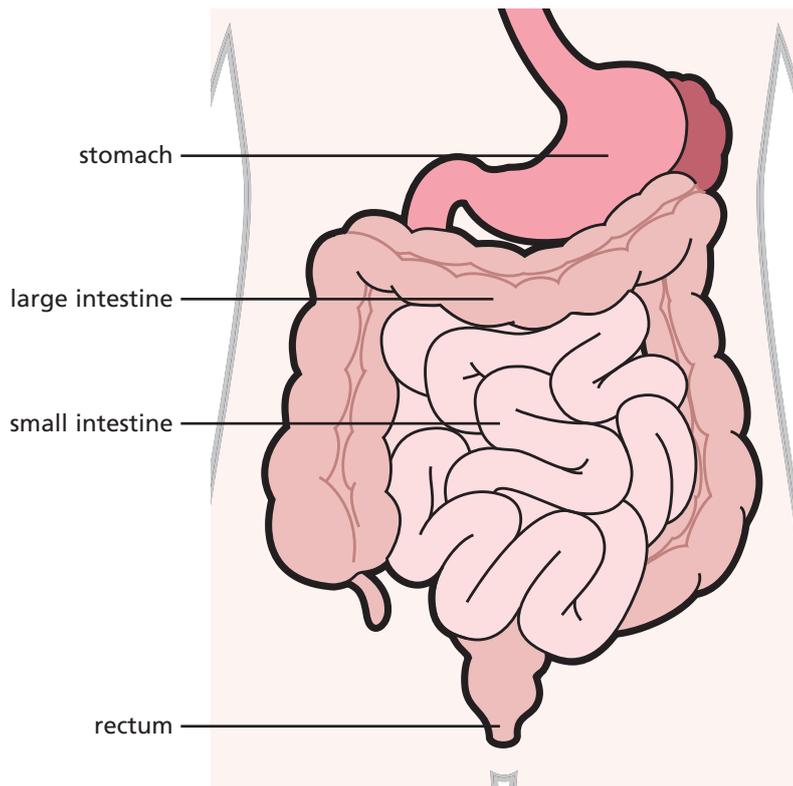
This information sheet from Great Ormond Street Hospital (GOSH) explains the causes, symptoms and treatment of abdominal adhesions and where to get help.

Abdominal adhesions are bands of tissue that form inside the abdomen which 'stick' organs and tissues together. Normally, the organs in the abdomen have a coating that allows them to slide over and around each other. Generally abdominal adhesions do not cause any problems but occasionally they can lead to obstruction and pain.

What causes abdominal adhesions?

Surgery on the abdomen is the most common cause of adhesions. This is especially the case following intestinal surgery. Over time, adhesions can tighten which can cause symptoms a long time after the original operation, sometime years later.

Adhesions do not form because something went wrong during the operation – it is the body's natural response to the abdomen being open to the air and handled during surgery. Adhesions can also develop following inflammation of the abdominal organs, such as peritonitis and appendicitis.



What are the signs and symptoms of abdominal adhesions?

Abdominal adhesions on their own may not cause symptoms but they can lead to intestinal obstruction. They can develop and start to cause symptoms at any point in a child's life, even in adulthood. There is nothing a person can do to cause symptoms or to prevent them. Sometimes they can make the intestines twist, kink or pull out of alignment. This can make it more difficult for food to pass through the intestine. It may stop food or faeces (poo) moving through the intestine completely, which is a life-threatening condition needing immediate treatment.

Symptoms of intestinal obstruction can include severe pain, vomiting, bloating and



constipation. In young children, they include sudden bouts of crying and pulling the legs into the body which then stop suddenly.

Vomiting, especially green vomit, is another symptom of intestinal obstruction, as your child is unable to digest food as usual. If the condition is not treated, your child will become dehydrated which can be life threatening.

The symptoms of dehydration may appear in phases and include lethargy, less frequent wet nappies and the soft spot (fontanel) on the top of the head may be sunken.

As little or no food or liquid can pass the twisted or kinked portion, your child may also pass little or no faeces (poo). This causes cramps, as the intestines cannot push food and liquid past the twisted section. The twisting or kinking may also cut off the blood supply to the intestines, which can lead to the tissues in the intestines becoming inflamed and starting to die.

How is intestinal obstruction caused by abdominal adhesions diagnosed?

Unless there is an acute intestinal blockage, adhesions do not usually show up well on x-rays. Sometimes contrast scans may be used to show where the intestine is obstructed. Occasionally, an exploratory operation called a laparoscopy might be needed to look inside the abdomen with a telescope. This may be combined with treatment during the same procedure.

How is intestinal obstruction caused by abdominal adhesions treated?

Treatment is not usually needed for abdominal adhesions that are causing no problems. However, if they are causing intestinal obstruction, treatment with surgery to divide the adhesions is needed. The surgeon can use keyhole (laparoscopic) or open surgery depending on how well your child is at the time. If your child is very unwell, open surgery is usually preferred. The surgeon will divide any adhesions, straighten out the twisted intestine and check it for any unhealthy areas. If the intestines look healthy, the surgeon will put them back into the abdomen. The surgeon will remove any parts of the intestine where tissue has died. The amount can vary, but the surgeon will leave as much of the intestine as possible.

What happens next?

Some children may need to be fed through a tube into their veins (total parenteral nutrition or TPN) so the stomach and intestines can start to heal.

The outlook depends on how quickly the obstruction was diagnosed and treated as this in turn can influence the amount of damage to the intestines. If your child had a large amount of intestine removed, they may need to stay on TPN for a longer period. New adhesions can form after any abdominal surgery, and can cause further problems such as blockage or pain.

If you have any questions, please telephone 020 7405 9200 and ask for the ward from which your child was discharged.

Compiled by the Department of Specialist Neonatal and Paediatric Surgery in collaboration with the Child and Family Information Group

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