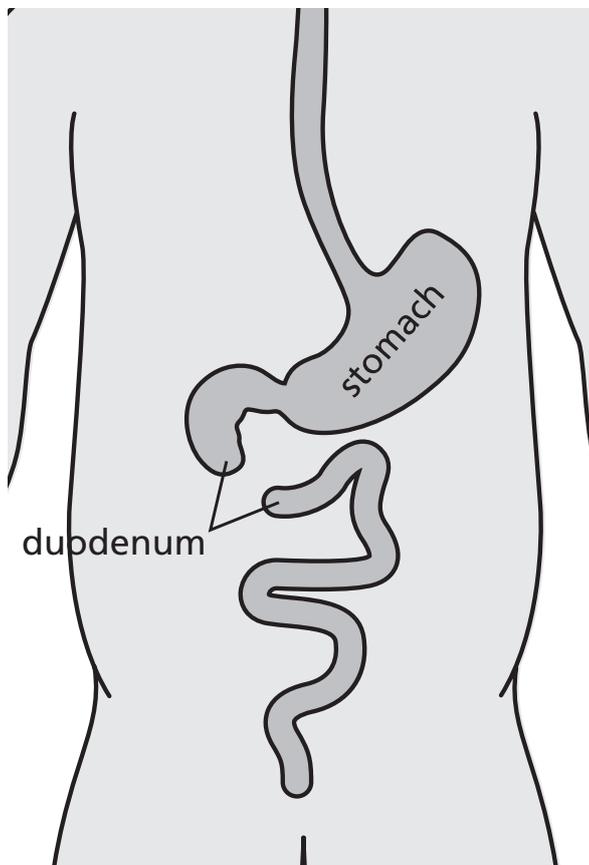




Duodenal atresia

This leaflet explains about duodenal atresia, how it is treated and what to expect when your child comes to Great Ormond Street Hospital (GOSH) for treatment.



What is duodenal atresia?

Duodenal atresia means the duodenum (first part of the small intestine just beyond the stomach) is closed off rather than being a tube. This stops food and fluid passing from the stomach into the intestines.

How is it diagnosed?

Duodenal atresia can sometimes be discovered during pregnancy as it often shows up on antenatal ultrasound scanning. You may hear it described as a 'double bubble'. Some babies

with this condition are born prematurely. Many babies appear well at birth but when they start to feed, they are sick and their vomit may be green. An x-ray scan can confirm this diagnosis.

Duodenal atresia is a rare condition and occurs in about one in 6000 births. It can be associated with other problems, so the doctors will examine your child closely to check if this is the case. One third of all children with duodenal atresia have Down's syndrome (trisomy 21).

How is it treated?

Duodenal atresia is repaired in an operation under general anaesthetic which lasts around two hours. The operation to repair the duodenal atresia can either be carried out using open surgery or sometimes using laparoscopic (keyhole) surgery.

Are there any alternatives?

No. Duodenal atresia always requires treatment to allow your baby to feed.

What happens before the operation?

Your baby will be transferred to the hospital soon after birth. To begin with, your child will be nursed in an incubator and will have a naso-gastric (NG) tube passed through his or her nose into the stomach. This will drain off the contents of the stomach and stop your child feeling and being sick. It also releases



any excess air from the stomach, which could make your child uncomfortable. He or she will also have an intravenous infusion (drip) of fluids and medicines.

The surgeon will explain about the operation in more detail, discuss any worries you may have and ask you to sign a consent form giving permission for your child to have the operation. An anaesthetist will also visit you to explain about the anaesthetic.

What does the operation involve?

The surgeon will open the blind end of the duodenum and connect it to the rest of the intestine. This provides a clear passage for food and fluid to travel from your child's stomach to his or her intestine.

Are there any risks?

All surgery carries a small risk of bleeding during or after the operation. During the operation, the surgeon will minimise any bleeding by sealing off the blood vessels affected. There is a very small chance that nearby structures in the abdomen could be damaged during surgery but this is a very rare occurrence.

There is a chance that the area where the two ends of bowel were joined could start to leak, allowing bowel contents to escape into the abdomen. This is usually treated with antibiotics, but a second operation may be needed to check the leaking portion.

Every anaesthetic carries a risk of complications, but this is very small. Your child's anaesthetist is a very experienced doctor who is trained to deal with any complications.

There are two ways of carrying out the operation: using laparoscopic (keyhole) surgery or open surgery. The surgeon will discuss the most appropriate method with you. There is a small possibility that having started the procedure using laparoscopic surgery, it will not be possible to repair the atresia using this method. The surgeon will then change to use

open surgery during the same operation.

It can take a while after the operation for the bowel to start working properly so your child may need to be fed intravenously using total parenteral nutrition (TPN) for a while. This affects many children and is explained further in the next section.

What happens afterwards?

Your baby will come back to recover either on the intensive care unit or our surgical ward. You will be able to visit as soon as he or she is settled. All babies are closely monitored after the operation, and so your baby will be connected to monitors to check his or her breathing, heart rate and oxygen levels. If your child needs help with breathing, he or she will be nursed on the intensive care unit and connected to a ventilator. He or she will also be given pain relief through the intravenous infusion (drip).

While your child's intestines recover and start to work, he or she may be fed through a tube into his or her veins (total parenteral nutrition or TPN). This will gradually be replaced by breast or bottled milk, given through the naso-gastric tube when your child is able to tolerate this. As your baby recovers, you will be able to feed him or her from the breast or bottle. Over time, the drips and monitors will be removed one by one.

The nurses on the ward will encourage you to look after your baby as much as you feel able while he or she is recovering. This can be daunting, especially while your baby is connected to drips and monitors, but it will become easier with time. If you are worried about caring for your baby, please talk to the nurses. You will be able to go home or be transferred back to your local hospital once your baby is feeding properly and gaining weight. Most children stay in hospital for one to two weeks, but occasionally a longer stay is needed.

Your local health visitor or community paediatric nurse will visit you regularly. We will send you details of your outpatient appointment in the post, soon after you leave hospital.



What is the outlook for children with duodenal atresia?

If the duodenal atresia occurs on its own with no other associated problems, the outlook is very good, with the majority of children growing up to live normal lives, working and raising a family. The outlook for children with duodenal atresia and other conditions varies, depending on how severe the other problems are. Some children who have had duodenal atresia develop a problem with gastro-oesophageal reflux when they are older. This is where the contents of their stomach flow back up the oesophagus (gullet) causing pain and irritation. For more information about this, please read our leaflet *Gastro-oesophageal reflux: information for families*.

Is there a support group?

There is no support group for those with duodenal atresia, but the following organisations may be able to help:

BLISS

Helpline: 0500 618 140

Email: information@bliss.org.uk

Website: www.bliss.org.uk

Contact a Family

Tel: 0808 808 3555

Email: info@cafamily.org.uk

Website: www.cafamily.org.uk

Down's Syndrome Association

Tel: 0845 230 0372

Email: info@downs-syndrome.org.uk

Website: www.downs-syndrome.org.uk

You should call your local hospital or GOSH if your baby:

- vomits a large amount when feeding
- has a swollen stomach
- vomits green liquid
- is not gaining weight

Compiled by the Specialist Neonatal and Paediatric Surgery department and Neonatal Intensive Care Unit in collaboration with the Child and Family Information Group

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