This leaflet explains about choanal atresia and what to expect when your child comes to Great Ormond Street Hospital for treatment.

What is choanal atresia?
Choanal atresia is a rare condition that is present from birth. The nasal passages are blocked by bone or tissue. This condition can affect one or both nasal passages. When only one side is blocked, a baby may not show many symptoms and so the condition may not be diagnosed for some time. When both sides are affected, a baby will have some difficulty breathing and so the condition is likely to be diagnosed soon after birth. Choanal atresia causes breathing difficulties, as babies do not breathe properly through their mouth for the first few months.

Choanal atresia is a rare condition and affects about one in every 10,000 births. It is slightly more common in girls than boys. It can be associated with other problems and the doctors will examine your child carefully to check if this is the case.

How is it repaired?
It is repaired in an operation under general anaesthetic (so your baby is deeply asleep), which lasts about an hour.

Are there any alternatives?
No, choanal atresia always requires treatment so your baby can breathe easily and effectively.

What happens before the operation?
Your baby will be transferred to Great Ormond Street Hospital soon after birth. He or she may have a plastic tube (oral airway) passed into the mouth to keep it open, making breathing easier. A feeding tube will also be passed through your baby's mouth so that he or she can be fed breast or bottled milk.

The surgeon will explain about the operation in more detail, discuss any worries you may have. He or she will 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 make a hole through the bone or tissue blocking the nasal passages. To make sure these holes stay open, the surgeon will put a small, plastic tube in each nostril. These tubes, called nasal stents, are held in place by stitches. Please see our nasal stents leaflet for more information.

Are there any risks?
All the doctors who perform this operation have had lots of experience and will minimise the chance of problems occurring.

All surgery carries a small risk of bleeding during or after the operation. 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.

What happens afterwards?
Your baby will come back to the ward to recover. All babies are closely monitored after the operation. Your baby will be connected to monitors to check his or her breathing, heart rate and oxygen levels.

A few hours after the operation, your baby will be able to feed, either by breastfeeding or from a bottle. It may take a few days for your baby to become used to breast or bottle-feeding, so we may give him or her extra feeds through the feeding tube as well. The stents will need to be kept clear for your baby to breathe easily. They will need to be suctioned regularly, especially before each feed. The nurses will teach you how to suction so you can look after your baby at home. You will have lots of new skills to learn but we will make sure you are confident before you go home. Remember that there is always someone on the end of the telephone at Great Ormond Street Hospital to advise and reassure you.

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 once your baby is feeding properly and gaining weight. Your local health visitor or community paediatric nurse will visit you regularly.
Coming back to the hospital
The stents are usually removed after six to twelve weeks, or sometimes a little longer. Your baby will need to be admitted for one night to have this done – we will contact you with details nearer the time.
About six weeks after the stents have been removed, your baby will need to have a check up. This is usually done under a general anaesthetic, so that the surgeon can check easily whether the nasal passages are still wide enough for your baby to breathe easily and effectively. Very occasionally, the surgeon may need to re-insert the stents if the passages have narrowed.

What is the outlook for babies born with choanal atresia?
Once the choanal atresia has been repaired, the outlook for babies with no other problems is good. Most grow up to lead normal lives, working and raising a family. If your baby has other problems, the outlook will depend on these – the doctors will explain the likely outlook for your baby in more detail.

If you have any questions, please contact Peter Pan Ward on 020 7829 8825 or the Neonatal Intensive Care Unit on 020 7829 8812.

You should contact your family doctor (GP) if:
- your baby is having difficulty breathing
- your baby has yellowish ooze from his or her nose
- your baby is bleeding from his or her nose
- your baby has a high temperature of 37.5°C or higher
- the stents become loose or fall out