

Saint Mary's Hospital Newborn Intensive Care Unit

Information for Parents

Chest Drains

What is a chest drain?

A chest drain is a piece of plastic tubing. One end is placed in the space around your baby's lungs and the other end is attached to a vacuum seal. Air or fluid can then be drained away.

Which babies need a chest drain?

Some babies, especially those who are premature and on a ventilator (breathing machine), can develop a 'pneumothorax'. This is when air leaks into the space surrounding the lungs and the lungs then collapse. This needs urgent treatment with a chest drain so that the lung can be re-inflated.

A 'pleural effusion' is when fluid collects in the space surrounding the lungs. This fluid can make it difficult for the lungs to work properly. It is sometimes necessary to remove this fluid using a chest drain.

How is the chest drain inserted?

The drain will normally be inserted into the side of your baby's chest.

First the baby's chest is cleaned. Local anaesthetic is then injected into the skin overlying one of the spaces between baby's ribs.

A small cut in the skin (about 1 cm) is made. The chest drain is then pushed through the cut and connected as described above. Sticking plaster and a stitch is used to keep it in place.

Is it safe?

Yes, but there can be some problems:

• The tube may need to be moved to ensure that it continues to drain properly.



- There is a small risk of infection in either the overlying skin or in the space surrounding the lungs.
- Very rarely, it is possible for the nerve that goes to the diaphragm (a chest muscle that helps with breathing) to be damaged.

When the drain is removed the hole is closed with paper (butterfly) stitches.

After the skin has healed there will be a small scar.

How long will it stay in?

After the drain has been inserted a chest X-ray will be done to make sure that it is working properly.

For those babies on a ventilator the chest drain will usually stay in place until baby is breathing on their own.

Sometimes fluid collections (pleural effusion) can persist for some time and in these cases chest drains may remain in the chest until the problem resolves.

Will I be informed before a chest drain is inserted?

Air can leak into the space surrounding the lungs very quickly and it needs to be drained urgently if it occurs.

Although you will, of course, be informed as soon as possible, insertion of a chest drain is an emergency life saving procedure.

It is therefore important that the drain is inserted as soon as the problems are diagnosed.

This may mean that the drain has to be inserted before there has been an opportunity to inform you.

Who do I ask for more information?

Please ask to speak to one of the nurses or doctors if you have any further questions.

