



Oxford University Hospitals
NHS Foundation Trust

Oxford Craniofacial Unit

Posterior Distraction

Information and advice for parents and carers



Your child is going to have (or has had) an operation called Posterior Distraction. This is an operation to release the bone at the back of their skull, improve the shape of the back of their head and increase the space for the brain to grow.

This is done by separating a section of the bone at the back of the skull and mounting it on one or two small screw-like devices called distractors (or pins), which stick out through the skin on the side of the head. Over the next few weeks the distractors can be lengthened. This pushes the bone further back, to increase the size of your child's head, and is called Active Distraction.



Position of the distractor (pins)

Within a very short time you will be able to see the changes to your child's head. After about 2-3 weeks, the Active Distraction will be stopped and the pins left in place for 1 to 2 months. This allows the new bone that has formed where the skull was separated to become hard. Your child will then have a small operation to remove the pins.

Whilst you are on the ward you will be shown how to do the distraction yourself if you wish. You don't have to do this, if you don't want to. To start with this may seem frightening, but is in fact very easy to do. You might also be worried that it is going to be painful for your child, but this is not the case.

Your child will be reviewed in our clinic or on the ward on a regular basis, particularly in the first few weeks after surgery. Your child's head will be X-rayed, measured and photographed from time to time, to keep a record of their progress.

The following information will help you care for the distractors and give you some simple tips on what you will need to do during this time.

Active Distraction

This is carried out once a day for up to 20 days, depending on instructions from your child's consultant.

To carry out the Distraction, please follow the instructions below:

1. Place the end of the screwdriver over the small 6 sided nut on the pin. The circled arrow on the flat side of the screwdriver handle should be facing upwards. Make sure hair is not wrapped around the pin.
2. Turn the screwdriver in the direction of the arrow for three complete turns, until the circle is back at the top. Then give it an additional one third turn. This will produce 1mm of Active Distraction.
3. Remove the screwdriver from the pin.
4. Repeat the process for the other distractor pin (if there are two).

Once completed, record your actions in the log book and make a note of how easy it was to turn the device.



Turning the distractors (pins)



Screwdriver

Pin site care

It is important to keep the pin sites clean and dry, to prevent infections. You should clean the pin sites at least once a day and more often if required. To clean the pin sites, follow the instructions below:

1. Assemble the items required:
 - a. dressing pack (sterile gauze and a sterile pot)
 - b. sterile normal saline sachet
 - c. cotton tip applicators (ear buds)
 - d. Betadine spray (antiseptic).
2. Wash your hands thoroughly with soap and water.
3. Put the sterile saline in the sterile pot and dip in the tip of the applicator/bud, to soak it.
4. With one touch, apply the applicator/bud to the skin around the distractor pin.
5. Wipe the bud around the pin in a circular motion in one direction.
6. Throw away the bud.
7. Repeat the process until the site is clean.
8. Use a piece of dry gauze to dry the site.
9. Spray the site with Betadine spray.
10. Repeat steps 3 to 9 above for each distractor.
11. Dispose of all the materials in a bin and wash your hands.

Even with good care sometimes the site can become infected. The signs of infection to look out for are:

- increasing redness of the skin around the site of the pin
- swelling around the pin site area
- discharge or pus from the pin site
- pain in the pin site area
- a high temperature (fever) or symptoms of being generally unwell.

If you notice any of these signs or have any concerns, please call the Craniofacial Nurse Specialist.

Tel: **01865 231 083**
01865 231 003

Helpful tips

The distractor pins do stick out a bit and parents often worry about what will happen if they get caught on anything. The following advice should help:

- Avoid using clothes which have to be pulled over the head. Shirts or blouses that button up will be easier to get on.
- You could buy your child a soft hat which will easily cover the pins.
- Be careful when giving cuddles; you won't hurt your child, but you may get a scratch from the distractor.

Parents often worry about how their child will manage to sleep at night. Most children sleep on their backs, so it won't affect them. If your child sleeps on their side or front, you will find that they quickly realise this feels uncomfortable and will turn over.

Remember that the distractors look far more concerning for you than they do for your child. Most of our children are happy and cheerful within a few days of the operation. The release of pressure in their heads will also quickly make them feel much better as well.

How to contact us

If you have any questions or concerns, please contact the Craniofacial Nurse Specialist.

Tel: **01865 231 083**

01865 231 003

(8.00am to 4.00pm, Monday to Friday)

Please leave an answerphone message if you don't get through and we will call you back.

Robin's Ward can be contacted outside of office hours:

Tel: **01865 231 25**

01865 231 255

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALS@ouh.nhs.uk**

This leaflet has been produced by the Oxford Craniofacial Unit
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