

Follow-up appointment

You will be reviewed by your ENT surgeon, usually in the outpatient department, within one month. An audiology appointment will be booked for two to three months' time. After the wound has healed, half yearly or yearly check-ups at the outpatient clinic are recommended. The hearing processor will be fitted and programmed about 2-3 months after surgery.

Are there any alternatives to surgery?

There may be non-surgical option for treatment depending on your diagnosis. You should discuss this with your consultant.

Useful Telephone Numbers

- ENT Department, Lister Hospital
☎ 01438 314333, Ext. 5113 / 4118
- Bluebell Children's Ward, Lister Hospital
☎ 01438 284008 or 01438 285091
- Day Surgery Unit, Lister Hospital
☎ 01438 285775 or 01438 285776
- ENT Nurse Specialist (Monday to Friday, 9am - 5pm)
☎ 01438 314333, bleep 1028
Mobile: 0778 534 3359 or 0787 639 0290
- ENT Admission Office (waiting list)
☎ 01438 286836 or 01438 286835

In an emergency, dial 999 and request an ambulance or attend your nearest Emergency Department.

NHS 111 can help if you have an urgent medical problem and you're not sure what to do. It is available 24 hours a day, 7 days a week - ☎ 111

Useful ENT website: www.entuk.org

www.enherts-tr.nhs.uk

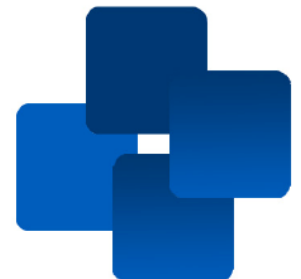
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You can request this information in a different format or another language.

Patient Information

Bone Conducting Hearing Implants (BCHI)

Ears, Nose and Throat Department



What are bone conducting hearing implants (BCHI)?

These are hearing aids and implants that are inserted behind the ear rather than into the ear canal. They utilise the conduction of sound via the skull to deliver better hearing into the inner hearing organs of the ear.

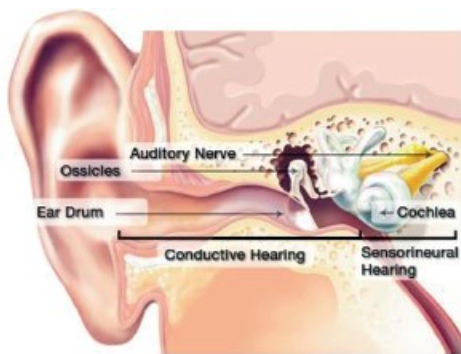
BCHI can be attached as a soft band worn on the head or fixed to a metal implant inserted into the skull (mastoid bone) or by using a magnet behind the ear.

It is usually advised for people who:

- have conductive and mixed hearing losses as well as people with single-sided deafness (unilateral hearing loss).
- are unable to wear conventional hearing aids due to ear abnormalities, such as bony growths in the ear canal or a very narrow ear canal.

There are two types of BCHI:

1 - Percutaneous (Direct Drive):



The implant is drilled through the skull and an abutment is placed through the scalp skin.

A hearing processor is then clipped onto the abutment, i.e. bone anchored hearing aid (BAHA) Connect. There are two parts:

- 1) Abutment
- 2) Titanium implant

2 - Transcutaneous (Skin Drive)

The implant is drilled through the skull and a magnet placed behind the ear in the form of a flat two pence sized disk. A hearing processor is held in place using magnetic attraction, e.g. Bonebridge implant, BAHA Attract.

Your audiologist and ENT surgeon will discuss the best option for you or your child.

What will the operation involve?

The operation will be carried out either under local anaesthetic (while awake) or general anaesthetic (while asleep).

A small incision is made in the scalp behind the ear; the bone behind the ear is exposed through a 'U-shape' or straight incision. A hole of 3-5 mm deep (depending on the thickness of the bone and choice of implant) is drilled. The implant is then inserted into this hole and tightly bound. The incision is closed around the implant. In percutaneous implants, the abutment will be protruding through the skin. The site is covered with a healing cap/dressings or a head bandage (you will receive instructions on when to remove this).

Sometimes, you will need to have this operation in two stages, particularly if the skull bone is very thin.

The initial implant will be fixed in one operation, with the abutment or magnet inserted three to six months later.

The operation usually takes between half an hour to 2 hours depending on the type of operation.

Benefits of percutaneous

- Generally a slightly more powerful hearing implant
- Can be done under local anaesthetic
- Vibrations forces are delivered directly to the cochlea (part of inner ear)
- Less transmission loss and better high-frequency gain compared to skin drive

Benefits of transcutaneous

- Intact skin and less chances of skin related issues
- Cosmetically more appealing
- Similar to hearing glasses (a combination of hearing aids and glasses)

Risks and complications of percutaneous

- Bleeding
- Pain
- Inflammation and infection around the abutment
- Skin overgrowth
- Brain fluid leak
- Persistent / chronic soft tissue complications
- Poor hearing outcome
- Early extrusion or failure to Osseo integrate.
- Taste disturbance

Risks and complications of transcutaneous

- Bleeding
- Pain
- Infection
- Hearing loss
- Brain fluid leak
- Poor hearing outcome
- Skin scarring / breakdown
- Can have issues with Magnetic Resonance Imaging (MRI)
- Taste disturbance

Does it Hurt?

You may feel mild pain afterwards. It is advisable to take painkillers to relieve the pain/discomfort.

Time in hospital:

Usually conducted as day case.

Post-operative care and advice:

- Your surgeon will advise you when to have your sutures removed
- Dressing will be removed in 1 week
- No school/work for 1 week
- Good hygiene is needed to maintain the normal usage of BAHA processors
- Start daily cleaning with alcohol-free wet wipe after dressing removal. Be careful not to interfere with the wound during the healing phase.
- After the initial healing phase (2 weeks), continue to wash once a day with alcohol free wipes. Mild soap and warm water may also be used.