BAHA (BONE ANCHORED HEARING AID) IMPLANT SURGERY

Expectations, Risks, Complications and Post-operative Instructions

Deafness in some cases occurs when conventional hearing aids are impractical because the external ear canal cannot utilise such an aid, due to blockage or disease. Also, when nerve deafness is present, an aid may be ineffective. In such cases, bone conduction techniques may be applicable. These function by vibration of the skull, stimulating the cochlea of the same ear or that on the opposite side.

The Cochlear BAHA device is effective in these circumstances to recover hearing.

The device has two variants. The original used a percutaneous (through-the-skin) titanium screw pedestal, with a processor attached by a ring clip. The more recent Attract model incorporates a magnetic disc and screw, sited under intact scalp, the processor held in place by a complementary magnet.

Implantation of the BAHA is undertaken to overcome deafness on the implanted side (both conductive and nerve types), generally when this ear is intolerant of an aid. Alternatively, the device is used when profound nerve deafness is present in the problem ear, and when the opposite ear has excellent hearing. In this situation the device acts by stimulating the better ear by bone conduction. This has the effect of eliminating “head shadow” – the hearing dead zone directly out from the ear. The device is not intended to give direction-finding ability, stereo effect or the better hearing of two ears (binaural summation), but is usually a great boon to the unilaterally deaf.

A 5 cm diameter “C-incision” in the scalp is used to implant the device.

Through this, the internal magnet is sited onto a screw fixed into a small hole drilled into the skull. The surgery takes 20-30 minutes.

More information

- Implantable Hearing Technology
- BAHA implants
- BAHA
RISKS AND COMPLICATIONS

The original device had significant cosmetic drawbacks that restricted its use. Also, the pedestal required a degree of hygiene and maintenance. Problem rates of up to 30% were recorded. Against this, the device provided hearing in many cases where no other option sufficed.

Hearing

Hearing in the operated ear remains unaffected by the surgery. If the other ear has lesser hearing, especially if Meniere's disease has affected that side, a cochlear implant is preferred instead of a BAHA.

Also, although many cases have ringing (tinnitus) in the ears before surgery, this may not be overcome.

Dizziness

Balance upsets are not expected from this surgery, and are usually related to the anaesthetic or due to unrelated central nervous system origins if present.

Infection, Pain

The nature of surgery predisposes to general surgical risks and scarring. Infection is rare. As the device is attached by magnetic force, some discomfort from this may occur but is normally transient.

Uncommonly, a collection of blood may form under the wound. This may cause more noticeable swelling and discomfort.

Please notify us at 07 38397677 if you have concerns.
POSTOPERATIVE INSTRUCTIONS

Surgical wound site

A head bandage applied at surgery will be removed before discharge from hospital. Keep the wound dry for a week, at which time you will be seen to check the wound and for suture removal. The site may be washed thereafter.

Antibiotics will be prescribed and provided prior to discharge. Take these as directed on the packet. Sometimes diarrhoea may occur; consult your pharmacist re medicine for this, but continue the antibiotics and take probiotics to help settle matters.

Pain, Discomfort

Analgesics will be given both in hospital and supplied at discharge. Pain after surgery is normally limited, but if concerned, contact us for advice. Some intermittent stabbing type pain may be experienced; this fades in a few weeks. Nausea may occur, but advise our staff if this occurs.

Activities

- Rest well after surgery; recovery varies from person to person.
- Remain active, within one's comfort zone. Return to full exercise after a week, if well. Return to work when well recovered.
- “Switch-on” is generally done 3-4 weeks after surgery. The hearing benefits are generally immediately evident, but it may take a little time to become accustomed to the new situation.

Our goal with the surgery is to deliver the best results with the greatest certainty and minimal distress. But in surgery there are no guarantees of success. If you have had a lesser result after surgery, we will do our best to treat the problem, hopefully overcoming this.

Please let us know at Queensland Otology if you have any concerns or questions, whether before or after:

Contact Numbers

Business Hours: (07) 3839 7677
After hours: (07) 3261 9570