For detailed instructions, please see the Cochlear Vistafix Treatment and Surgery Guide.

**STEP 1** Prepare the site

- Carefully mark the implant sites. The implants should be located directly under the anti-helix of the prosthesis.
- Two implants are often sufficient for satisfactory retention, though three may be needed for optimal retention. The ideal position is approximately 20 mm from the center of the external ear canal opening, at 4 o’clock and 1:30 (left side of the patient — 8:00 and 10:30 on right).
- The distance between the implants should be at least 10 mm.

**STEP 2** Make the incision

- Make an incision approximately 10 mm behind the implant sites, down to the periosteum.
- Make a cruciate incision in the periosteum at the implant site.
- Raise the edges with skin hooks.

**STEP 3** Reduce subcutaneous tissue

- Scrape hair from the flap.
- Remove all subcutaneous tissue with hair follicles under the skin flap.
- Remove subcutaneous tissue at the periphery of the flap holding the blade parallel to the skin.
- Trim the soft tissue down to the innermost layer (periosteum) to avoid regrowth of tissue and to avoid mobility.

**STEP 4** Drill with the guide drill

- Begin drilling with the guide drill and 3 mm spacer (2000 rpm) using a continuous manual irrigation drip.
- Move the burr up and down and slightly enlarge the hole to ensure visual inspection, and that the coolant reaches the tip of the drill.
- Check the bottom of the implant site repeatedly for bone.
- Use the drill indicator and abundant irrigation during all drilling procedures.
- If there is adequate bone thickness, remove the spacer and continue drilling to 4 mm.

**STEP 5** Drill with the widening drill

- Widen the implant site with the appropriate widening drill/countersink for the implants being placed (2000 rpm).
- Move the widening drill up and down during drilling to ensure that the coolant reaches the tip of the drill. Only use up and down movements; do not make the hole larger than the actual drill size. If necessary, use the dissector to remove bone chips from the drill flutes.
- When reaching the bone surface, use the widening drill to create a small countersink in the bone (maximum 0.5 mm). The widening drill for the Vistafix 3 System has been designed to facilitate countersinking.
**STEP 6** Place the implant

- Pick up the implant with the implant inserter. If using the prior generation Vistafix Implant, use the connection to handpiece to pick up the implant.

- Place the implant in the bone without irrigation until two complete rotations are achieved in the bone. Once two complete rotations of the implant have occurred, continue implant placement with drip irrigation.

<table>
<thead>
<tr>
<th>BONE QUALITY</th>
<th>SUGGESTED TORQUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact bone</td>
<td>40-50 Ncm</td>
</tr>
<tr>
<td>Compromised or soft bone</td>
<td>20-30 Ncm</td>
</tr>
</tbody>
</table>

**STEP 7** Close and suture

- Suture the edges around the flap down to the periosteum in order to hold the tissue in place.

- Lay the flap back and suture it down.

**STEP 8** Connect healing abutments or abutments

Healing abutments are recommended for use for all cases at the initial surgery to facilitate proper healing, with permanent abutments placed at a later date at the clinic.

- Using a 4 mm biopsy punch, make incisions through the skin over the implants.

- Pick up the healing abutment or abutment with the abutment holder and place it into the implant.

- Hand-tighten the screw partially with the abutment holder.

- Snap the abutment holder off the abutment.

- Finalize the tightening of the abutment screw to 25 Ncm with the machine screwdriver abutment and the counter torque wrench (low speed setting).

- In case of manual tightening, tighten the abutment screw to 25 Ncm using the multi wrench ("IN" facing upwards) with the machine screwdriver abutment. Use the counter torque wrench to counter torque for Vistafix 3, or the abutment clamp for prior generation Vistafix.

**STEP 9** Place the dressing and healing caps

- Healing abutments — Place a dressing around the healing abutments. Place a mastoid dressing.

- Abutments — Place the healing cap on the abutment and hand-tighten the screw using the Unigrip screwdriver. Place the healing cap either before or after the dressing. Place a mastoid dressing.