

Protocols for Cochlear Implantation

Committee Members:

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1. Referral

1. Referrals are to be accepted from ENT Consultants, Audiological Physicians and General Practitioners.
2. Adults and children of all ages can be referred for assessment. Each case will be considered on an individual basis.
3. The patient must have a severe to profound hearing loss which cannot be helped adequately by hearing aids.
4. The patient must be willing and able to attend the respective Cochlear implant Clinic for several assessment appointments before the operation as well as all the necessary programming and rehabilitation sessions after the operation.

2. Stage One Assessments

1. The patient will be seen by the ENT Consultant at the first appointment and referred to the audiologist and therapist for detailed evaluation.
2. If the patient is audiological suitable for cochlear implant, the consultant arranges for imaging i.e. a HRCT temporal bone and M.R.I. In cases of meningitis, a repeat M.R.I scan may be performed closer to the date of surgery.
3. The patient is seen by the Cochlear Implant Coordinator for counseling. Counseling at stage 1 involves:
 - a. History taking
 - b. Explanation of cochlear implant assessments
 - c. Explanation of surgical procedure
 - d. Dummy implant and external devices shown
 - e. Explanation of how the implant works
 - f. Cochlear implant information folder issued

4. The patient is seen by the Therapist for assessment of speech, language and communication modes. Therapy sessions will be scheduled for conditioning of the child and appropriate training and counseling of the parents.
5. An evaluation of the patient's speech and communication skills is carried out by the Speech and Language Therapist.
6. On completion of stage one assessment the results will be discussed at a Cochlear Implant Team Meeting and approval obtained before proceeding to stage two assessments.
7. Funding can be applied for if the patient proceeds to stage 2 assessments.

3. Stage Two Assessments

1. A clinical psychologist will see the patient at this stage. A family member or significant other will be asked to attend this appointment. The clinical psychologist sends a report to the Consultant and the Coordinator making recommendations regarding the patient's ability to cope with implantation and rehabilitation.
2. The patient is offered the opportunity to meet an Implantee. The patient is matched to someone of similar age and hearing loss if possible.
3. The patient is seen by the Cochlear Implant Coordinator for counseling. Counseling at stage 2 involves:
 - a. Choice of the implant system and hearing with an implant
 - b. Risks of surgery and post operative care
 - c. Vaccination protocol and its importance
 - d. Switch-on, mapping and rehabilitation
 - e. Expectations
4. On completion of stage two assessments the results will be discussed at a Cochlear Implant Team Meeting and test results approved before proceeding to stage three assessments. A date for surgery may be set if appropriate.

4. Stage Three Assessments

1. Final pre-surgical counseling is carried out by the Cochlear Implant Surgeon / Audiologist / Hearing Therapist. This includes:

- a. Expectations questionnaires
- b. Vaccination and preoperative fitness
- c. Consent for the surgery

5. Team Meetings

1. Team meetings are held once a month to discuss patients' progress and other business relating to the cochlear implant programme
2. The Cochlear Implant Team includes the following professionals:
 - a. Consultant ENT Surgeon
 - b. Social worker
 - c. Cochlear Implant Coordinator
 - d. Hearing Therapist
 - e. Audiologist
 - f. Speech and Language Therapist
 - g. Clinical Psychologist

An open invitation to attend team meetings is extended to the following, who also receive copies of the team minutes.

- h. Anesthesiologist
- i. Theatre nurse

Others may be co-opted onto the team at a team meeting.

3. After stage two assessments, a decision will be made whether to proceed with surgery and a date will be set if appropriate.

6. Surgical

1. The consultant ENT surgeon will perform the cochlear implant surgery
2. The Audiologist will attend the surgery to perform intraoperative telemetry measurements

7. Post Operative Rehabilitation, Programming and Evaluation

1. The Hearing Therapist and Speech and Language Therapist perform the postoperative rehabilitation programme with the patient. The patient will then be seen at intervals to suit individual needs.
2. Switch-on of the cochlear implant system will take place around 2 – 4 weeks after surgery by the audiologist.
3. A patient's processor map is altered as required by the patient and is checked at regular intervals, 3 months, 6 months, 9 months, 12 months, 18 months, 24 months and annually thereafter.
4. Outcome measures regarding receptive and expressive skills are conducted at regular intervals to assess the progress of the child.