# Protocols and procedures for adults referred to the Tygerberg Hospital-Stellenbosch University Cochlear Implant Unit from countries outside of South Africa

### **Contact details:**

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You have been referred to our Cochlear Implant Unit at Tygerberg Academic Hospital-Stellenbosch University, Cape Town. Our unit was established in 1986 and is comprised of a highly skilled, professional medical and rehabilitation team who endeavor to provide the most appropriate management of your hearing loss within a multidisciplinary context. Members of our team include Ear Nose and Throat Surgeons, Audiologists, Speech and Language Therapists, as well as other health professionals. Younger children managed in our programme are also referred to the Carel du Toit Centre (<a href="www.careldutoit.co.za">www.careldutoit.co.za</a>) for appropriate re/habilitation by a skilled and experienced team.

There are a number of assessments and visits to medical health professionals which are necessary in order to establish whether cochlear implantation is the best treatment option for you.

Our team is careful in selection of appropriate candidates for cochlear implantation in order to ensure as far as possible the best outcome is achieved. The assessment process and selection criteria we use are in keeping with internationally established protocols.

It should be noted that the most critical factors determining a good outcome are duration of deafness, previous use of hearing aids, mode of communication (oral or signing) and in the case of a child, the age of the child. Cochlear implantation is contra-indicated in the case of older children and adults who do not use spoken language and their primary mode of communication.

Financial considerations are also a critical component, in particular for patients from outside of South Africa (initial costs as well as long-term maintenance, travelling, visa requirements and accommodation costs).

Initial costs include:

- Assessment process at Tygerberg Hospital;
- Ear Nose and Throat surgeon appointments;
- Radiological assessment

If you are found to be a suitable candidate for cochlear implantation, the cost of the surgery, device and long-term costs (including upgrades, spares and maintenance) will need to be paid for by you.

## THE PROCESS:

If you feel the above-mentioned factors are possible for you, you will be given appointments for the evaluation by the cochlear implant team. Part of this assessment will be at Tygerberg Hospital and part in the private sector.

# **ASSESSMENT**

The following needs to be in place for the assessment process:

- 1. You will need to be in Cape Town for a period of <u>at least two weeks</u> for the following procedures and appointments:
  - 1.1 An appointment with an *audiologist* at Tygerberg Hospital Cochlear Implant Unit. A full *history* is taken and the relevant information gathered. You will need to bring all relevant medical reports and history.
  - 1.2 Further hearing tests which will include behavioural and objective hearing tests.
  - 1.3 It is assumed that you will have already been fitted with hearing aids in your own country. If not a trial period with appropriately fitted hearing aids will need to be arranged.
  - 1.4 Appointment with an *ENT surgeon* who will assess your medical suitability for cochlear implantation and make arrangements for the Radiological assessment.
  - 1.5 Radiology this will be done at Panorama Mediclinic during the first week. This is in order to assess whether implantation is possible and includes CT scan, MRI scan of internal auditory structures and brain.
  - 1.6 A team meeting is held with all team members where the evidence is reviewed and a decision made as to whether cochlear implantation is recommended.
  - 1.7 Financial costs can be determined once a decision has been made as to whether your child will receive unilateral or bilateral cochlear implantation.

## FINANCIAL CONSIDERATIONS

- 1. Costs of assessment process and hospital visits (see attachment for estimated costs)
- 2. Cost of the device (approximately R275 000.00 for one system)
- 3. Costs of travelling (for assessment, surgery, programming of the device (every 3 months for first year, annually thereafter assuming no problems arise between visits).
- 4. Accommodation
- 5. Visa requirements
- 6. Audiologist visits and tests
- 7. Should an interpreter be needed the costs of this will need to be borne by the family, and be put in place by the family.

8. Long-term maintenance costs (replacement of battery, cables, coils and upgrades over time of the external sound processor).

Should the above conditions be met and possible for the family, arrangements can be made to book surgery and order the cochlear implant device if the person is found to be a suitable candidate. The cochlear implant system needs to be paid to the distributor prior to the surgery.

## SURGERY

The surgery is when the internal cochlear implant electrode array is inserted. This is arranged by the ENT surgeon and audiologist. It is approximately a 3 hour procedure (if one implant is being done). An overnight stay in hospital may be required.

### PROGRAMMING OF EXTERNAL SOUND PROCESSOR

Approximately 2-3 weeks after the surgery activation of the external device is done, where the sound processor is fitted. You will need to be in Cape Town for a minimum of <u>3 weeks</u> for the fitting process and rehabilitation.

Follow up visits are every 3 months for the first year. You will need to be in Cape Town for 1-2 weeks during these visits. Follow-up visits are required annually thereafter. The visits include appointments with the other team members.

Cochlear Implantation is a wonderful technology which makes it possible for deaf individuals to access sound. However, it is expensive to acquire and maintain, requires dedication, high levels of motivation and input in order to achieve the best possible outcome. Successful cochlear implant use is dependent on full commitment from you, your family, and the team.

If you would like to make contact with other patients who are in a similar situation please let us know. We are able to put you in touch with other recipients.

For more information please look at our website: www.cochlearimplants.co.za