Tygerberg Hospital – Stellenbosch Cochlear Implant Unit: Pre-operative Imaging Checklist

Date:

Surgeon:

Radiologist:

Audiologist:

CT SCAN: ANATOMY:

Skin Thickness:
RHS: ..... mm
LHS: ..... mm

External Auditory Canal
RHS: Perpendic ☐ Sloping ☐
LHS: Perpendic ☐ Sloping ☐

Mastoid air cell system
RHS: Aerated ☐ Diploic ☐ Sclerotic ☐ Opaque ☐
LHS: Aerated ☐ Diploic ☐ Sclerotic ☐ Opaque ☐

Mastoid access
RHS: Aeration -> access: Good ☐ Adequate ☐ Inadeqt ☐
LHS: Aeration -> access: Good ☐ Adequate ☐ Inadeqt ☐

Sigmoid sinus position
RHS: Posterior ☐ Anterior ☐ V Ant ☐
LHS: Posterior ☐ Anterior ☐ V Ant ☐

Tympanic Membrane
RHS: Normal ☐ AbN ☐ Reason: .....
LHS: Normal ☐ AbN ☐ .....

Middle Ear
RHS: Normal ☐ AbN ☐ Reason: .....
LHS: Normal ☐ AbN ☐ .....

Posterior Tympanotomy
RHS: Aerated: ☐ Dense: ☐ Size: ..... mm RW access: ..... % ..... ° angle
LHS: Aerated: ☐ Dense: ☐ Size: ..... mm RW access: ..... % ..... ° angle

Round Window
RHS: Overhang: ..... % **Angulation:** Axial: ..... ° Post ☐ Ant ☐ Sagittal: ..... ° Inf
LHS: Overhang: ..... % **Angulation**: Axial: ..... ° Post ☐ Ant ☐ Sagittal: ..... ° Inf

Cochlear rotation: line off 180° to basal turn
RHS: ..... ° Rotated towards sagittal ☐ Rotated towards coronal ☐
LHS: ..... ° Rotated towards sagittal ☐ Rotated towards coronal ☐

Cochlear diameter:
RHS: ..... mm LHS: ..... mm

Cochleo-Vestibular form
RHS: Normal ☐ AbN: ☐ Classification: .....
LHS: Normal ☐ AbN: ☐ Classification: .....

Cochlear Patency
RHS: ST Normal ☐ Ossification: Partial ☐ Site: ..... Total ☐
SV Normal ☐ Ossification: Partial ☐ Site: ..... Total ☐
LHS: ST Normal ☐ Ossification: Partial ☐ Site: ..... Total ☐
SV Normal ☐ Ossification: Partial ☐ Site: ..... Total ☐

Vestibular Patency
RHS: Normal ☐ Ossification: Partial ☐ Site: ..... Total ☐
LHS: Normal ☐ Ossification: Partial ☐ Site: ..... Total ☐

Internal Auditory Canal Size / Form
RHS: Normal (>3mm) ☐ Small(=/<3mm) ☐ Bulbous? ☐ Comment .....
LHS: Normal (>3mm) ☐ Small(=/<3mm) ☐ Bulbous? ☐ Comment .....

Cochlear Aqueducts
RHS: Normal ☐ Large ☐
LHS: Normal ☐ Large ☐

Vestibular Aqueducts
RHS: Normal ☐ Enlarged ☐ ..... mm
LHS: Normal ☐ Enlarged ☐ ..... mm

Facial Nerves
RHS: N ☐ AbN: ☐ Site & Reason: ..... **CFD** N ☐ Y ☐
LHS: N ☐ AbN: ☐ Site & Reason: ..... **CFD** N ☐ Y ☐

Vascular Structures
RHS: Carotids N ☐ AbN: ☐ Jug Bulbs N ☐ AbN: ☐ Emmissaries N ☐ AbN: ☐
LHS: Carotids N ☐ AbN: ☐ Jug Bulbs N ☐ AbN: ☐ Emmissaries N ☐ AbN: ☐

MRI SCAN

Cochleo-Vestibular form **Sennaroglu: Lab Apl/Rud Otocyst/Coch Apl a,b/Com Cav a,b/Coch Hypopl I,II,III,IV/Incomplete Partition I,II,III,IV**

RHS: Normal ☐ AbN: ☐ .....
LHS: Normal ☐ AbN: ☐ .....

Cochlear Fluid Signal

RHS:	ST Normal ☐	↓ fluid signal:	Partial ☐	Site:	Total ☐
	SV Normal ☐	↓ fluid signal:	Partial ☐	Site:	Total ☐
LHS:	ST Normal ☐	↓ fluid signal:	Partial ☐	Site:	Total ☐
	SV Normal ☐	↓ fluid signal:	Partial ☐	Site:	Total ☐

Cochlear Contrast uptake

RHS:	ST Normal ☐	↑ uptake	Partial ☐	Site:	Total ☐
	SV Normal ☐	↑ uptake	Partial ☐	Site:	Total ☐
LHS:	ST Normal ☐	↑ uptake	Partial ☐	Site:	Total ☐
	SV Normal ☐	↑ uptake	Partial ☐	Site:	Total ☐

Vestibular Fluid Signal

RHS:	Normal ☐	↓ fluid signal	Partial ☐	Site:	Total ☐
LHS:	Normal ☐	↓ fluid signal	Partial ☐	Site:	Total ☐

Vestibular Contrast Uptake

RHS:	Normal ☐	↑ uptake	Partial ☐	Site:	Total ☐
LHS:	Normal ☐	↑ uptake	Partial ☐	Site:	Total ☐

INTERNAL AUDITORY CANAL CONTENTS:

Cochlear Nerve

RHS:	Normal ☐	Hypopl. ☐	Absent ☐	**Single CVN:**	N size ☐	Single CVN: Hypopl. ☐	Absent CVN ☐
LHS:	Normal ☐	Hypopl. ☐	Absent ☐	**Single CVN:**	N size ☐	Single CVN: Hypopl. ☐	Absent CVN ☐

Vestibular Nerve

RHS:	**Sup V N**	N ☐	Hypopl. ☐	Absent ☐	**Inf VN:**	N ☐	Hypopl. ☐	Absent ☐
LHS:	**Sup V N**	N ☐	Hypopl. ☐	Absent ☐	**Inf VN:**	N ☐	Hypopl. ☐	Absent ☐

Facial Nerve

RHS:	Normal ☐	Hypoplastic ☐	Absent ☐
LHS:	Normal ☐	Hypoplastic ☐	Absent ☐

BRAIN

Normal ☐ Abnormal ☐ Reason .....
.....

IMPLANT DECISION:

Pt. Candidacy? Yes ☐ No ☐ Reason: .....

Ear Candidacy:

RHS:	Otolo Yes ☐	No ☐	Reason: .....
	Radio Yes ☐	No ☐	Reason: .....
	Audic Yes ☐	No ☐	Reason: .....
	Vestił Yes ☐	No ☐	Reason: .....
LHS:	Otolo Yes ☐	No ☐	Reason: .....
	Radio Yes ☐	No ☐	Reason: .....
	Audic Yes ☐	No ☐	Reason: .....
	Vestił Yes ☐	No ☐	Reason: .....

Ear chosen: RHS ☐ LHS ☐ Reason: .....

Is hearing / balance preservation a special aim?: Yes ☐ No ☐
Reason: .....

Implant Reccomendation:

Make: .....

Model: .....

Reason: .....