

# Adult Case Studies

**Kirsty Ellis** Audiology & Yorkshire Auditory Implant Service

**Judith Bird** Addenbrookes Hospital

**Linor Llwyd Jones**, Betsi Cadwaladr, University Health Board.

**Ann-Marie Dickinson**, Salford Care Organisation

# Ten testing - a case study

**Kirsty Ellis**

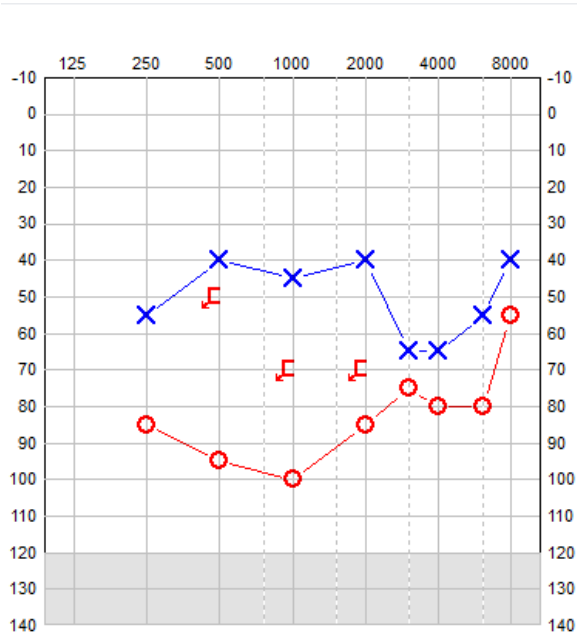
**Audiology & Yorkshire Auditory Implant Service | Audiology & Listening for Life Centre  
BRI**

# History

- 47 year old man with a 9 year history of progressive hearing loss.
- Relied on lip-reading for communication, unable to hear on phone for last 5 years. Given up own business as unable to talk to clients on phone. Unable to hear radio/television.
- Struggled to adapt to sound of hearing aids, distortion, headaches when set to full prescription.



# Audiological results



21/01/2021

TEN testing:

Right ear not tested (limited capability due to level of hearing loss)

**Left ear dead regions identified at 1, 3 and 4kHz**

CERA: in line with behavioural thresholds

OAE: absent bilaterally

Screening ipsilateral reflexes: absent at 0.5, 1, 2 and 4kHz

Speech testing:

CUNY lip-reading alone- 14%

CUNY aided bilaterally 70dB A- 95%

BKB aided bilaterally female speaker 10% 70dB A

AB words- 27% phonemes, 13% words

# Outcome

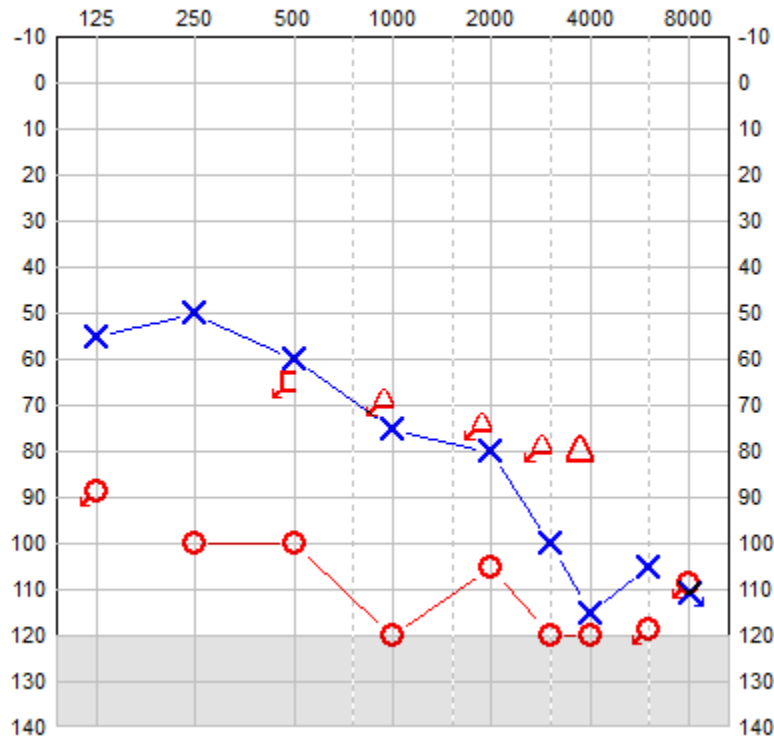
- Decision to implant right ear made at MDT- uses hearing aid in left ear.
- At 12 weeks post implant- able to make some phone calls with Bluetooth streaming through sound processor.
- Able to listen to TV without subtitles.
- Able to follow conversation without lip-reading from second switch on appointment.
- Female BKB @ 70 dB A with CI right unaided left ear- 100% key words
- AB words @ 70 dB A 83% phonemes 67% words.
- Now able to make phone calls comfortably to mobiles when streaming sound the processor- can struggle with landline.

# Adult living with Dementia – case study

**Judith Bird**

Addenbrookes Hospital

# Case study - dementia



- Male age 84
- HL first noticed after a stroke in 1975
- Hearing loss progressed and has been struggling to manage over the last 5 years
- Dementia reported affecting movement and speech
- Dementia and hearing difficulties lead to frustration at home
- Treated for depression
- Appropriately aided
- AB words 43%

# Dementia and CI assessment

## things to consider

- Equality of access (NICE)
- Impact on quality of life
- Support for using the device
- Support for practising with new sound
- Opportunities for conversation
- Capacity for decision making
- Reliability of results



# Action/Outcome

- No attempt made at formal cognitive assessment
  - Should services be doing this?
- Initial support by audiology and rehabilitation for progressing to next stage of assessment
  - Good family support
  - Good opportunities for conversation practice
  - Appears motivated
- Medical concerns (frequent TIAs)
- More information sought about dementia diagnosis to inform about capacity for decision making

# Adults with a Learning Disability – 2 case studies

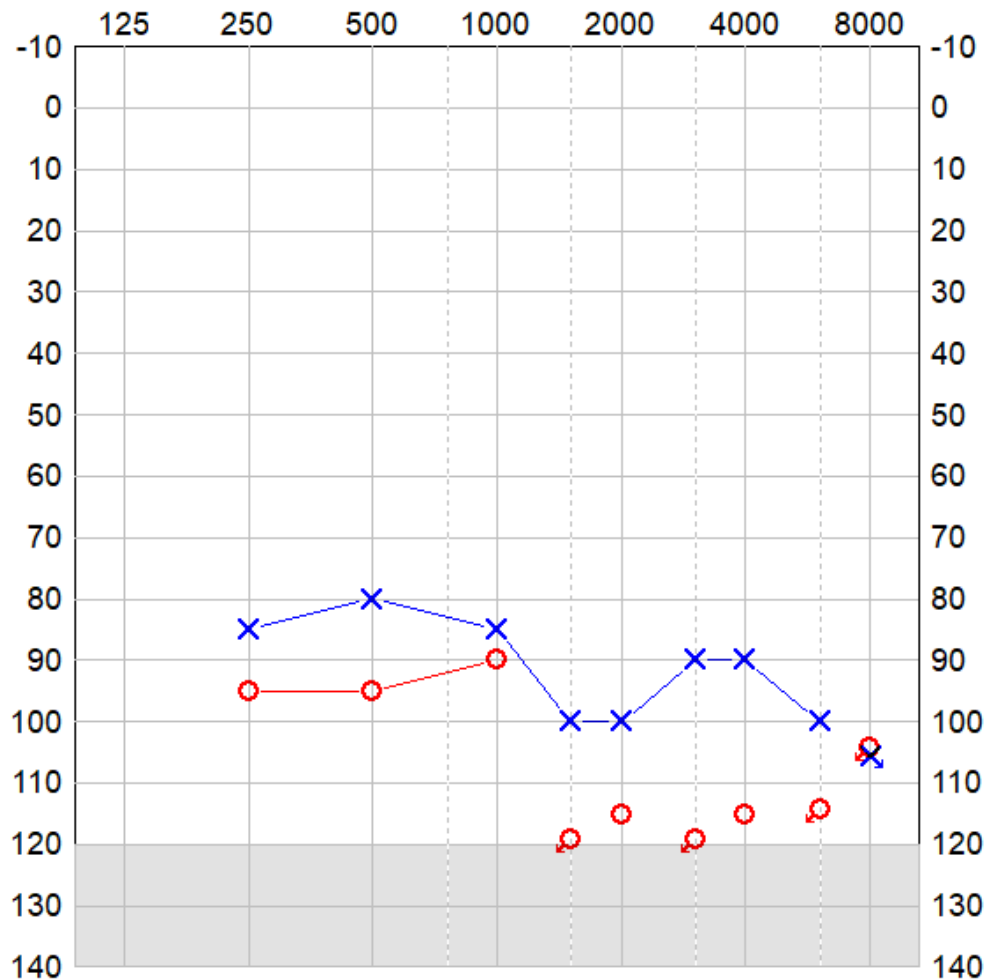
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**Ann-Marie Dickinson,**

Salford Care Organisation

# Learning disabilities case study



- 46 yr old F (K)
- Progressive congenital HL and cerebral palsy with moderate level of learning disability
- Consistent HA use since childhood
- Lives with foster carer, attends day centre 5 times a week
- Finding social activities at day centre difficult now, unable to hear alarms
- Knows someone with a CI and keen to proceed
- Speech tests (bilateral):

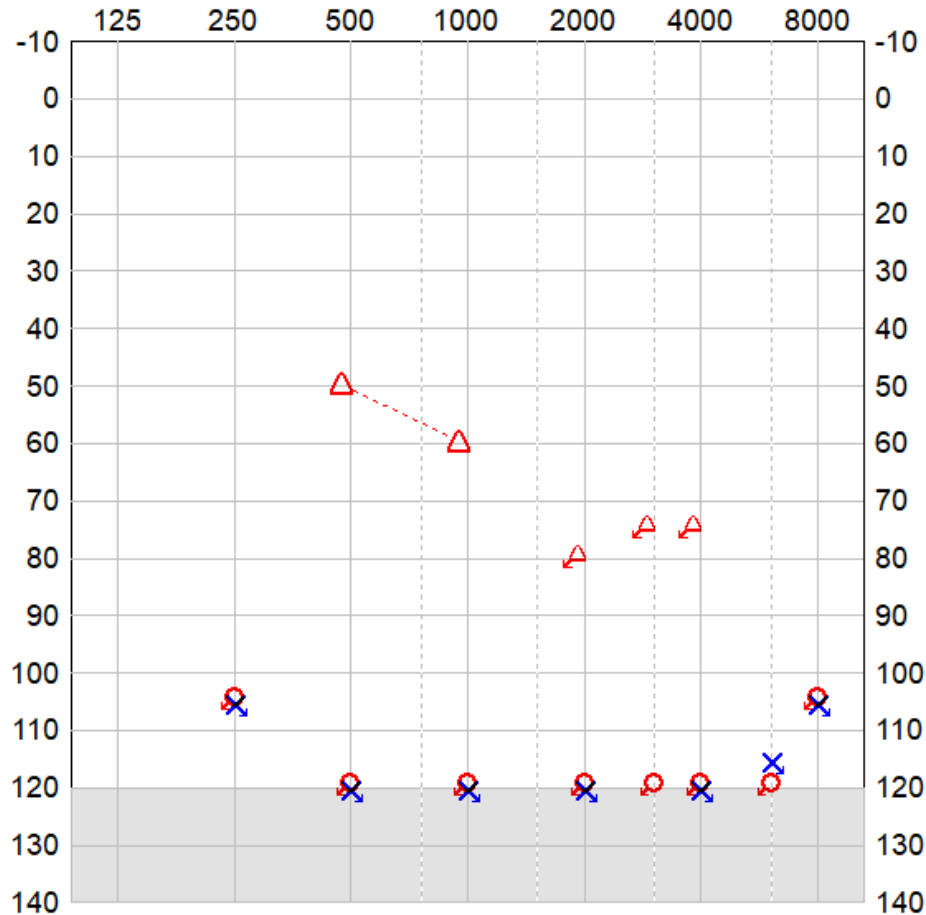
BKB = 68%

AB Words = 6% w; 21% ph

- K seen by team Psychologist, SALT and ENT surgeon as well as CI team for assessment
- K was deemed to retain some limited information between appointments but lacks ability to consent for CI
- Best-interest consent decision made via Independent Mental Capacity Advocate (paternal father did not want to be involved in medical care decisions)
- Arrange photos of theatre to be shown before CI surgery so K is familiar with surroundings on day of surgery
- K's foster carer allowed to stay on ward with K around time of surgery
- To proceed with **Right CI**

- CI surgery 24/03/2022 – straightforward surgery
- Switch-on 14/04/2022
  - Pt happy with surgery and recovery
  - Very excited for switch on
  - K responded to voice without lipreading immediately after switch-on (CI alone)
- 1 week appt – 22/04/2022
  - Reporting to be hearing lots of new sounds e.g. tap running, dog barking, footsteps, phone ringing, birds
  - Enjoying the sound around her
  - Speech tests – **BKB: CI alone = 23%, CI+HA = 70%**
- Making really good progress, happy to wear CI all day

# Learning disability case study 2



- 21 yr old M (R)
- Communicates through Makaton & lipreading
- Medulloblastoma treated as an infant with chemo and radiotherapy caused progressive HL as well as moderate-severe LD, visual problems, raised intracranial pressure (shunt intact)
- Recent sudden drop in hearing
- Prior to recent change was responding and communicating orally with HAs
- Behaviour and speech has also deteriorated since hearing drop
- Unable to consent
- Best-interest decision
- Awaiting bilateral CIs