



BRITISH ACADEMY
OF AUDIOLOGY

Putting it all together to see the whole picture

Jason Smalley

BAA Board Director for Service Quality

Paediatric Assessment is sometimes about using a test battery approach to get to your final answer

A few nuggets of gold though:

1. Children with normal hearing and peaked tympanometry should have OAEs (around 98-99% dependant on the study)
2. TE-OAE is more sensitive to mild losses than DP-OAE

3. Children with present reflexes at normal levels usually have normal hearing and don't have ANSD
4. Parental perception of 'concern' has proven time and time again to not be a good indicator of a hearing loss in early years (under 2)
5. Children can have 'incidental glue-ear' – adults shouldn't
6. If you cannot behaviourally or objectively test a child without sedation, neither you or the child have not failed / done anything wrong.

Case 1.

Please could you see this 6y 3 month – school report
some issues with attention

History: Well baby, passed NHSP, no other significant
medical history

Mum has no concerns with hearing or with speech,
able to follow instructions at home but can ‘zone out’

Where shall we start?

BOA

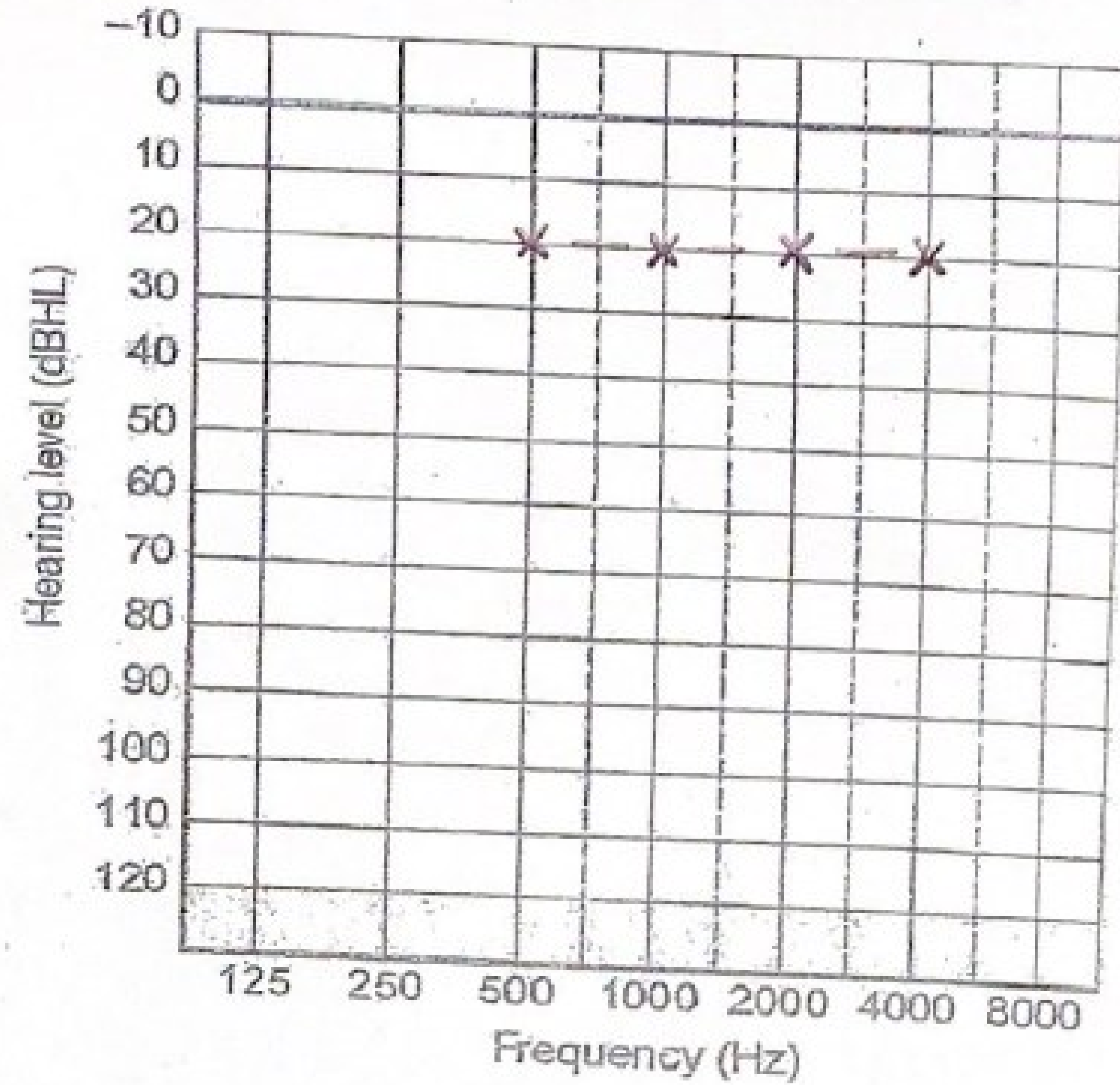
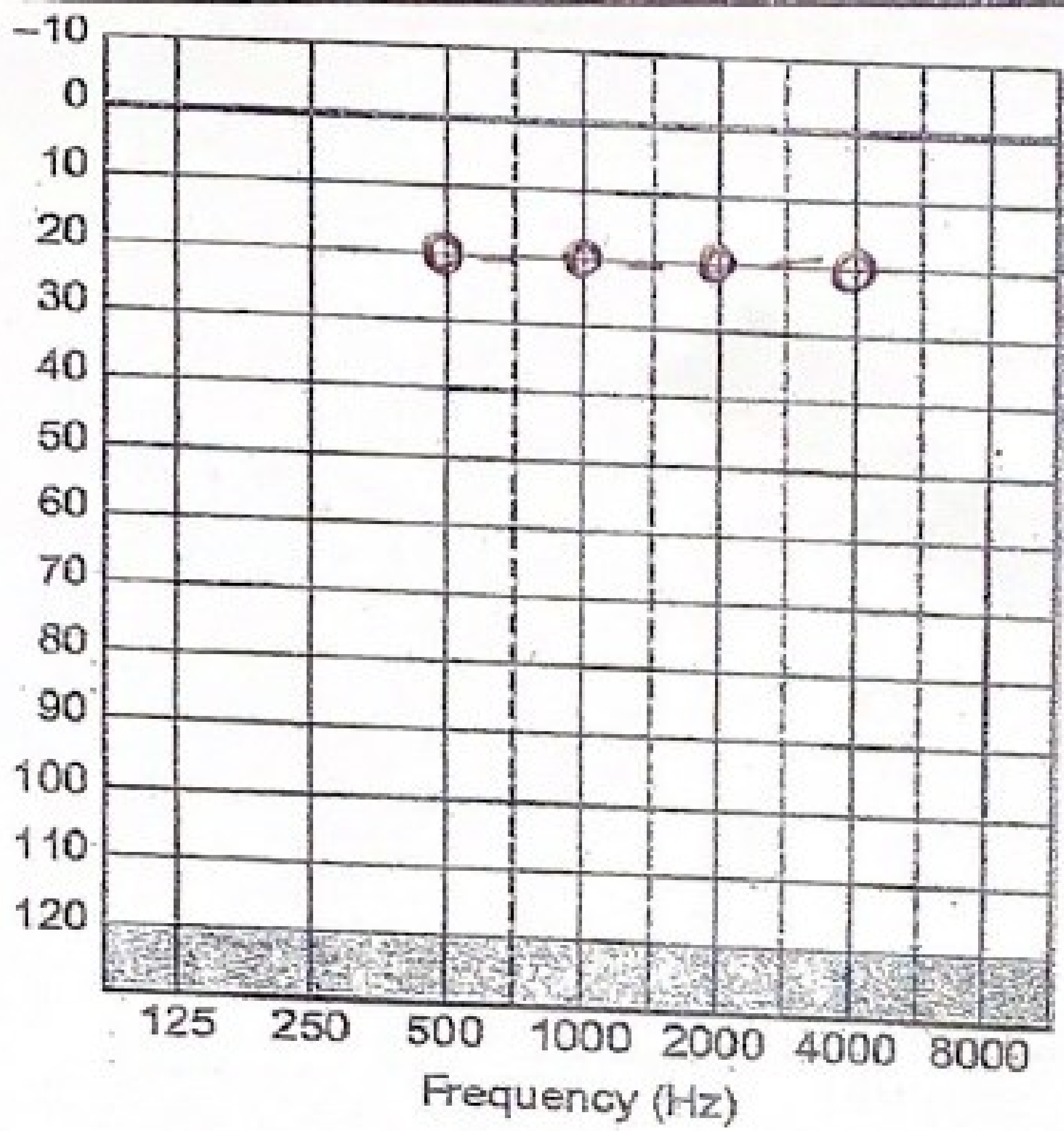
Distraction

VRA Soundfield

VRA insert

Performance

PTA (with a button)



Anything else?

Case 2.

Please could you see this 2y 2 month – mum has
some concerns with hearing

History: Well baby, passed NHSP, no other significant
medical history

Mum has a few concerns with hearing, but these are
fairly non-descript, speech is appropriate

Where shall we start?

BOA

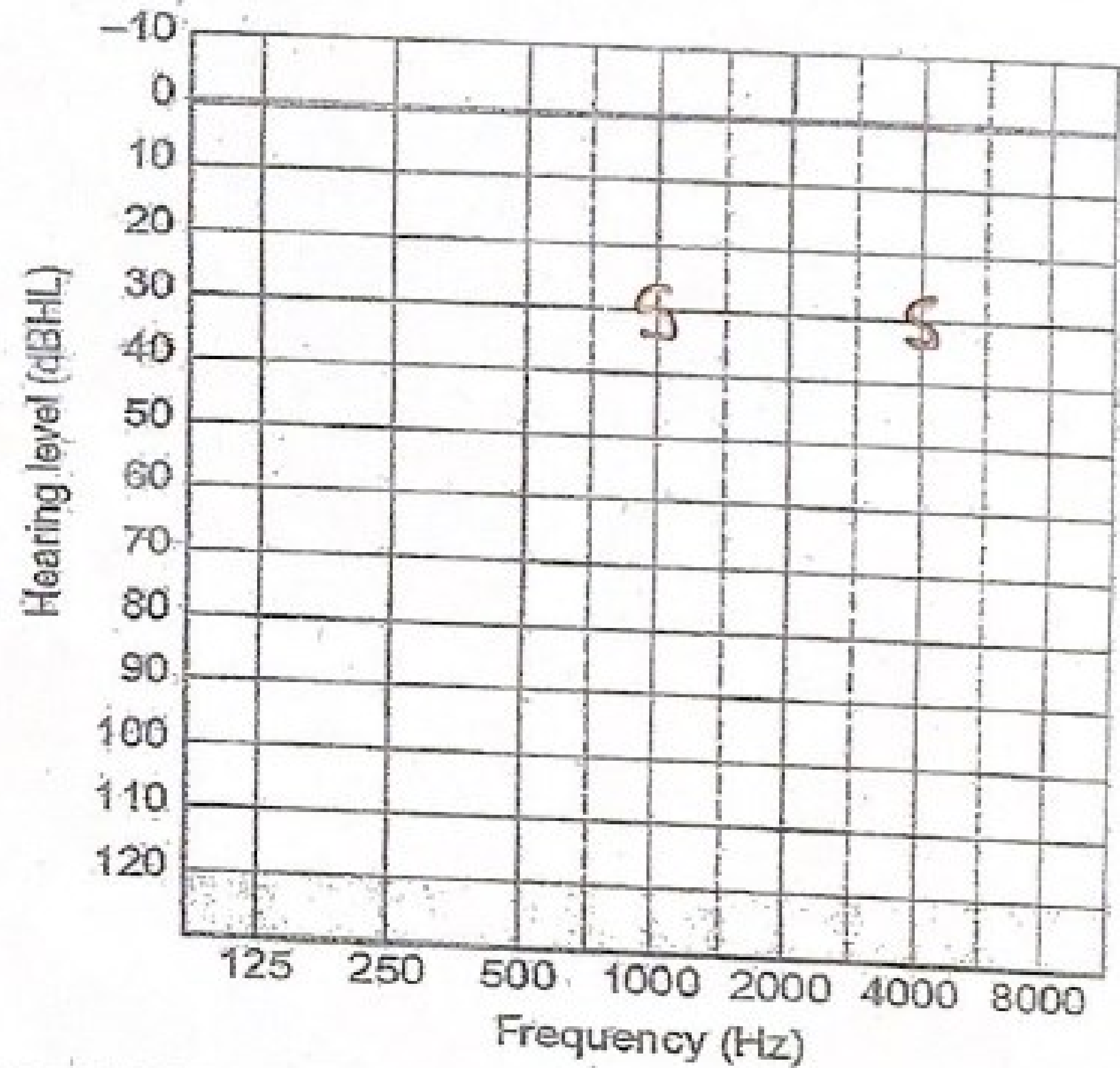
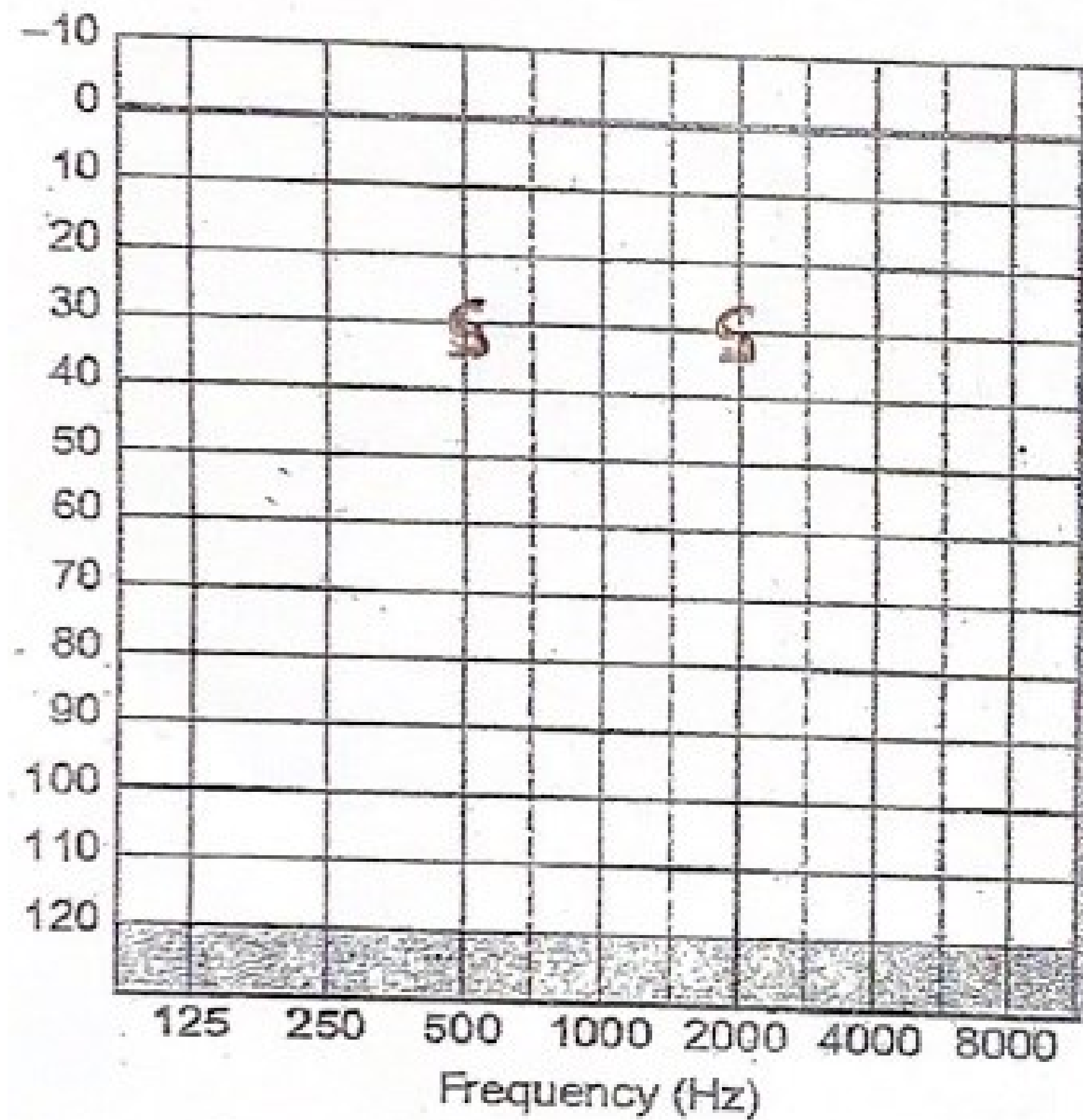
Distraction

VRA Soundfield

VRA insert

Performance

PTA (with a button)



Anything else?

Tried to put the inserts in, child didn't like them at all and pulled them out

Shall we do anything else?

Case 3

Please could you see this 3 year old 5 month old with queries over speech development?

History: NICU baby, born 34 weeks, some jaundice but cleared up with phototherapy, passed newborn hearing screen

No other significant medical history

Just started nursery, mum no concerns with hearing, is able to follow instructions, some words but not putting beyond 2 word sentences together.

Where shall we start?

BOA

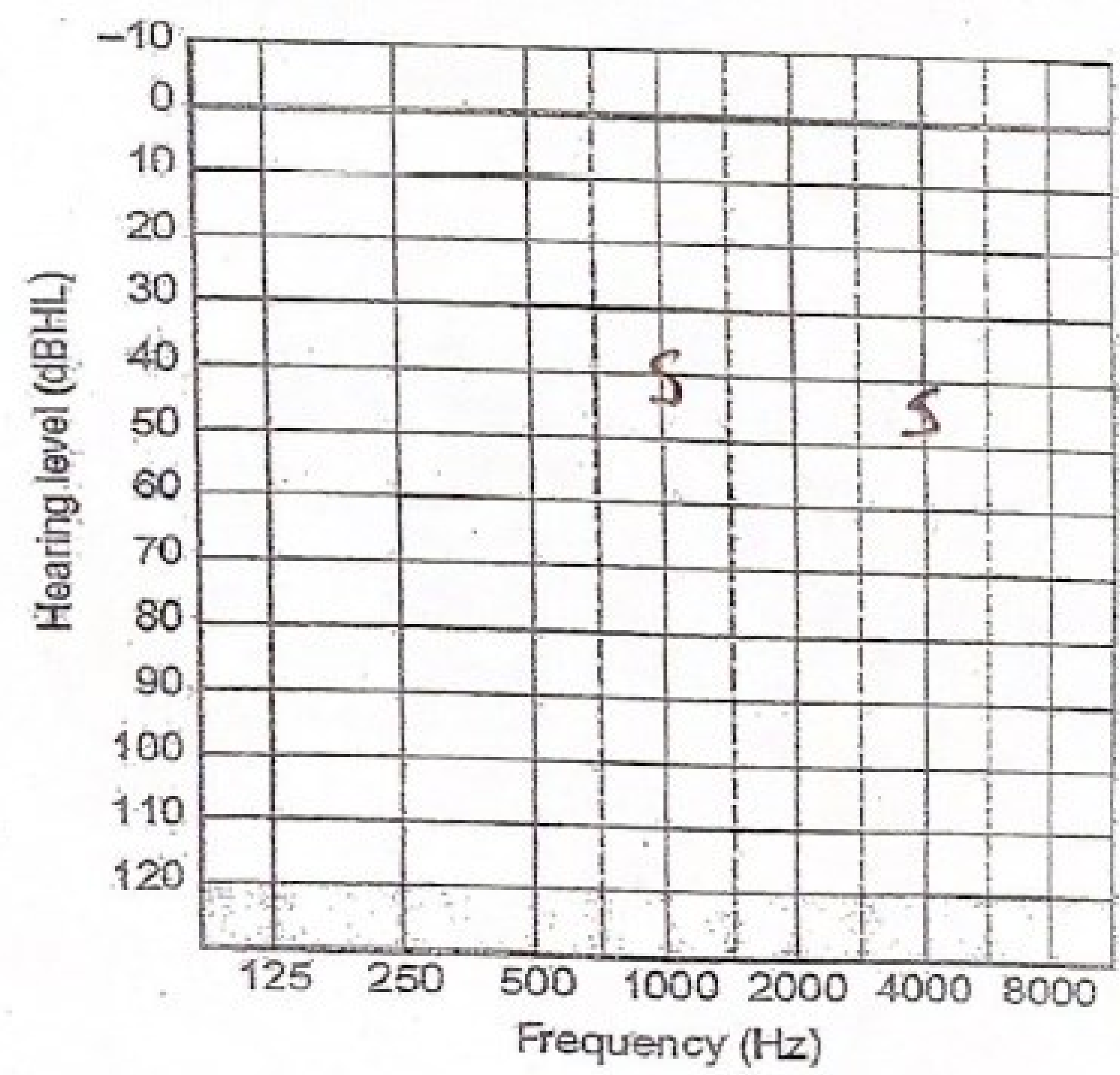
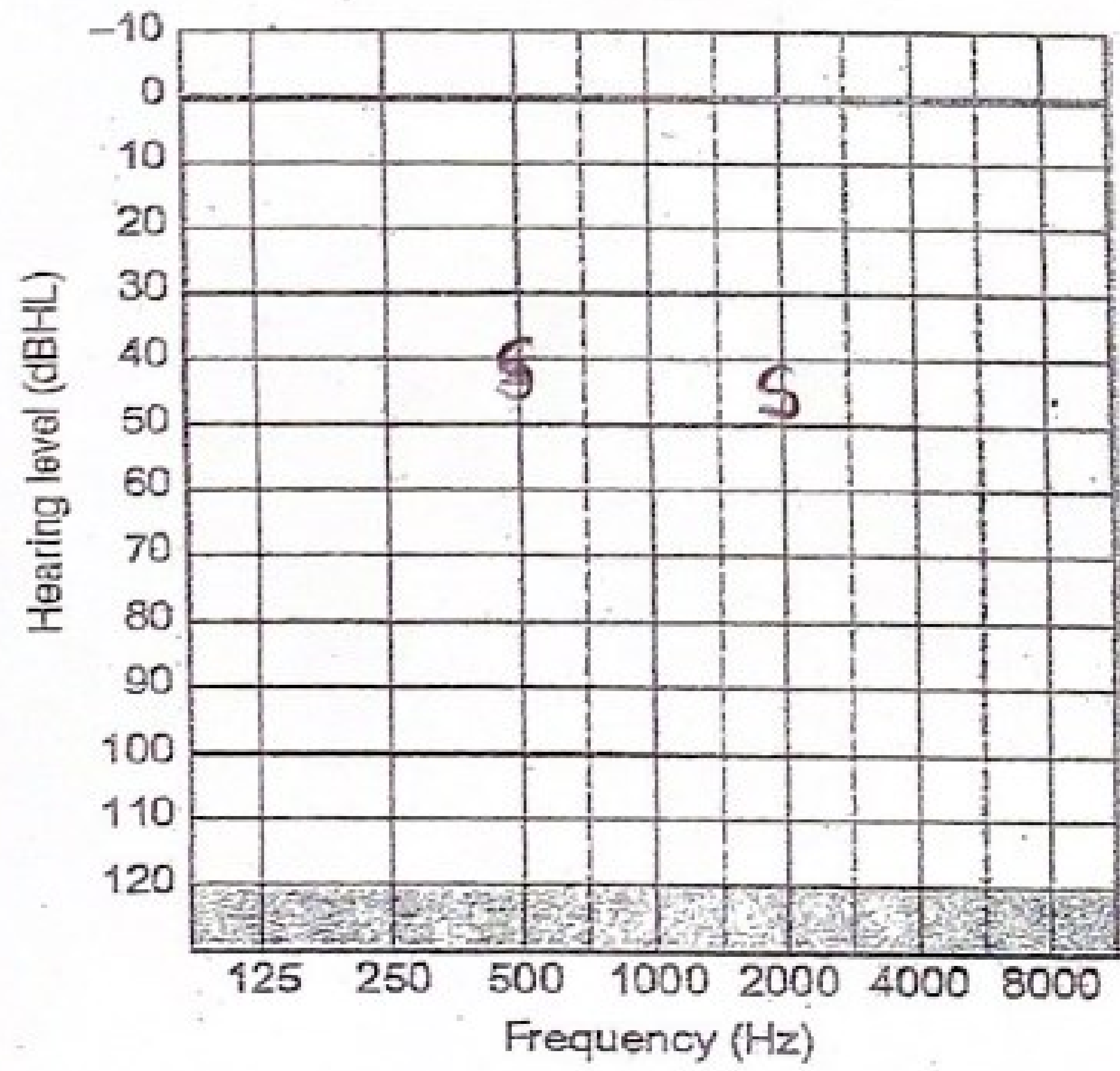
Distraction

VRA Soundfield

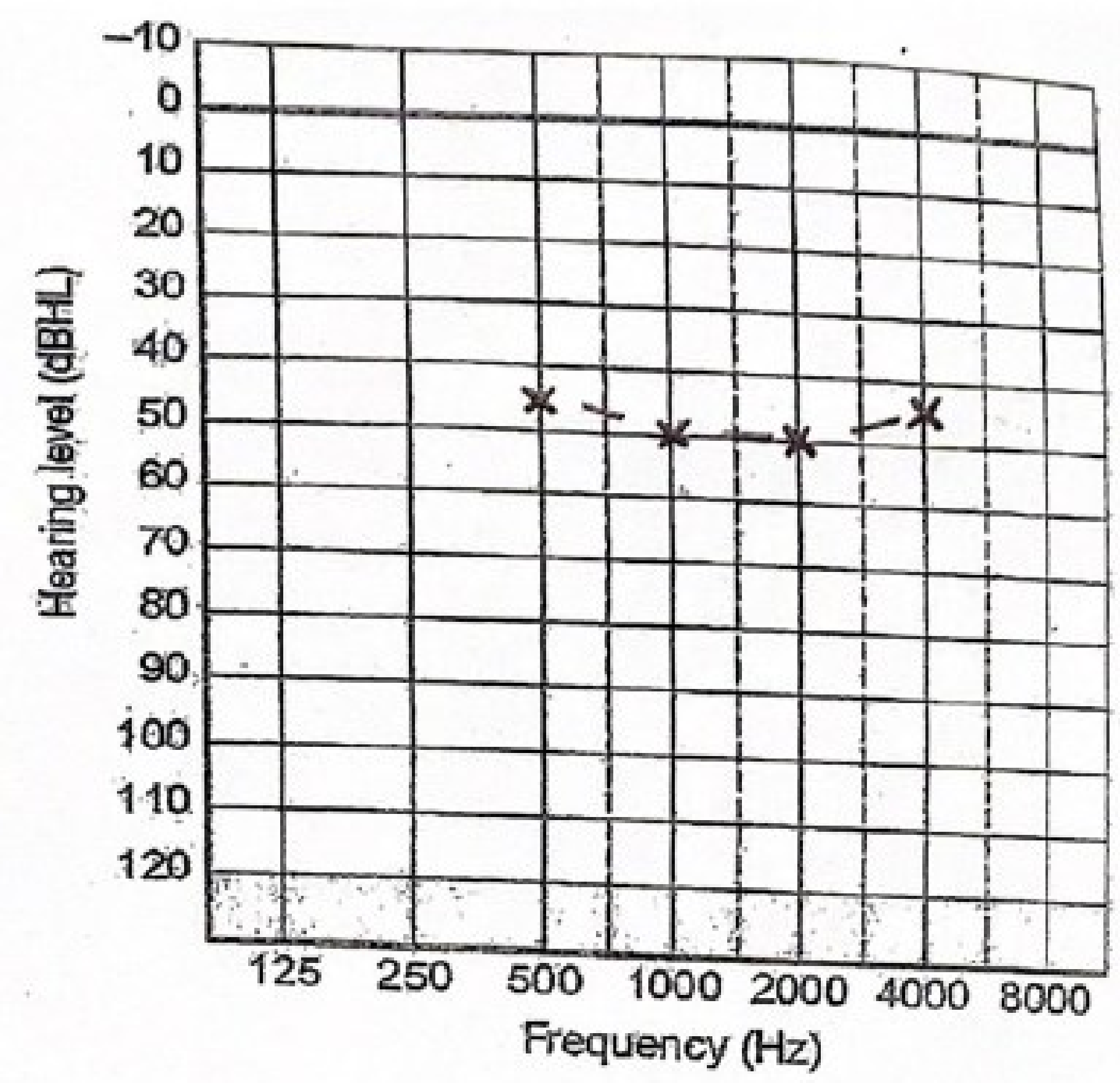
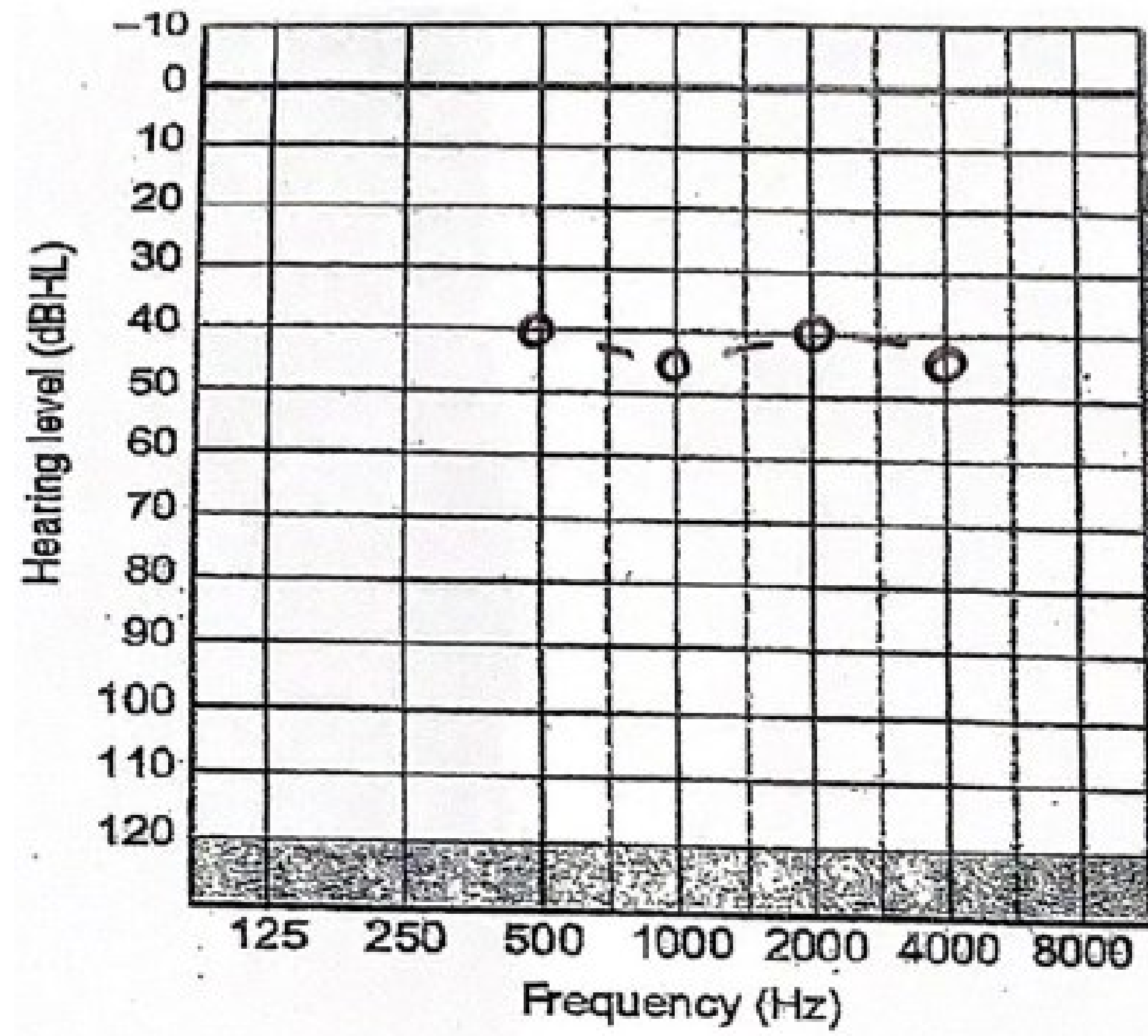
VRA insert

Performance

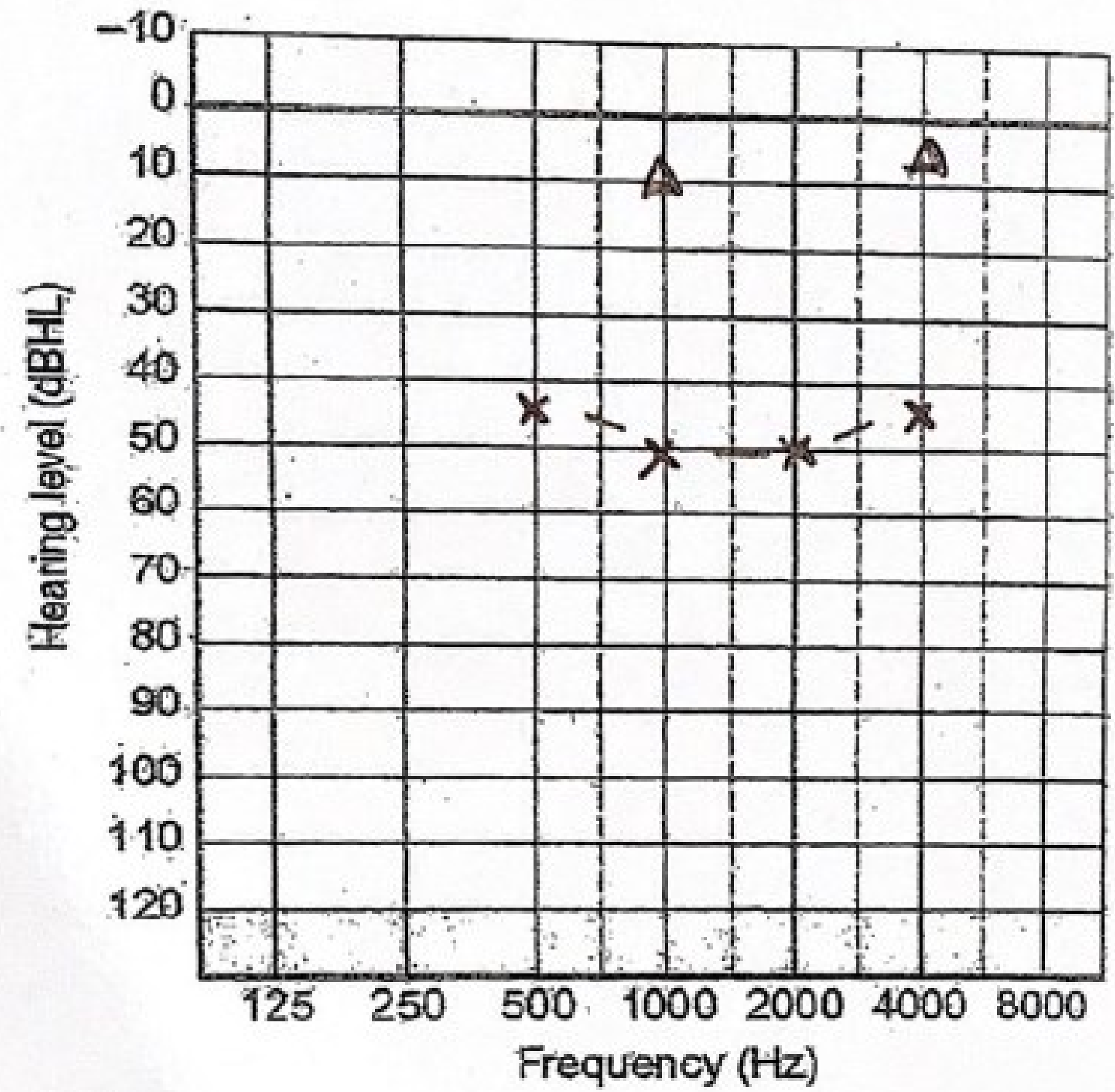
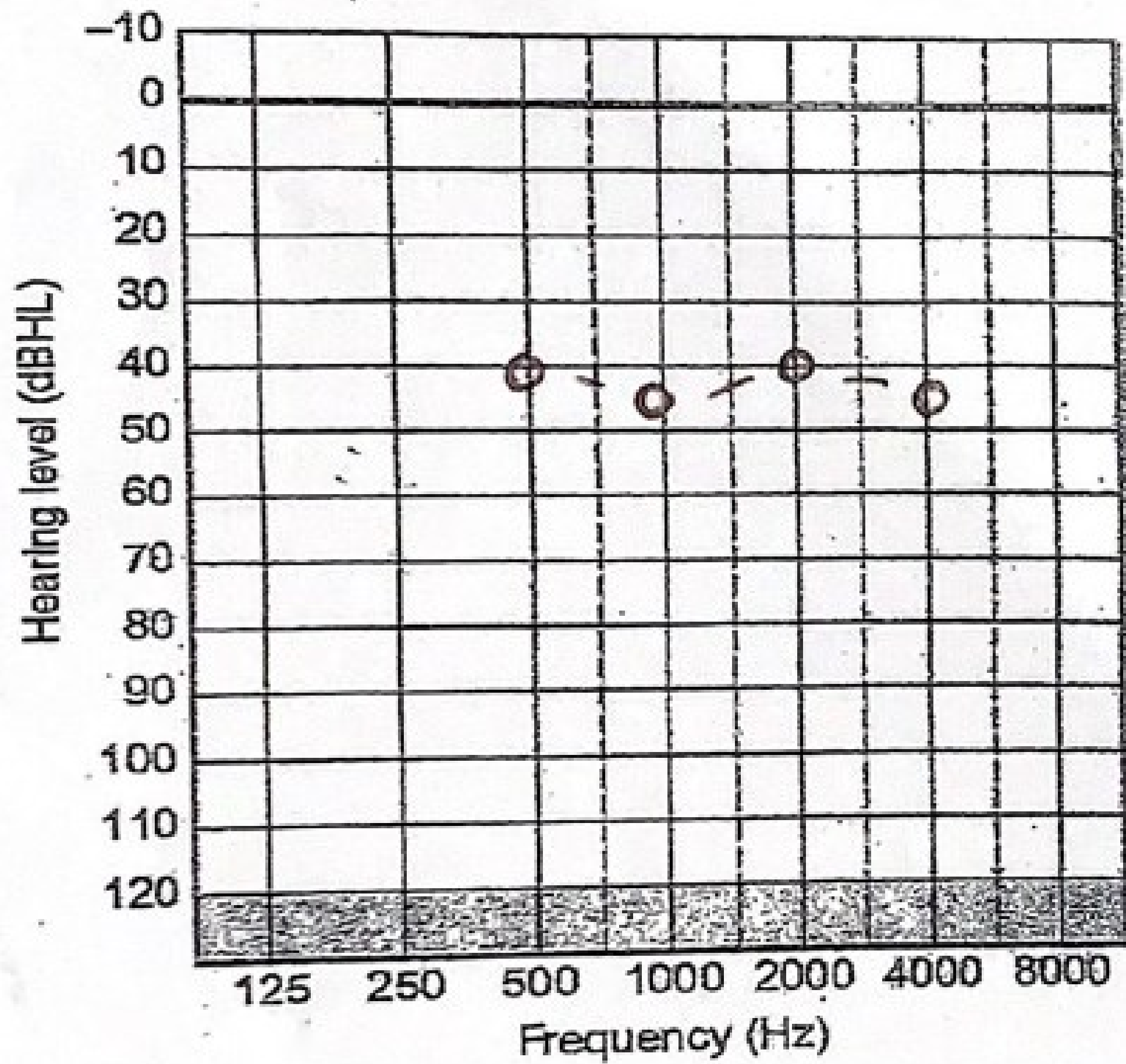
PTA (with a button)



Anything else?



Anything else?



Anything else?

Case 4

History:

Well baby, Referred newborn hearing screen on right ear

ABR at birth in eHL:

	Right	Left
OAE:	Absent	Clear response at 3 frequencies
	1kHz AC \leq 20	\leq 20
	4kHz AC = 50	\leq 20
	4kHz BC $>$ 45 (M)	N / A
	2kHz AC =40	N/ A
	2kHz BC =40 (M)	N/ A

A suitable debrief took place, parents have been offered an informed choice of a unilateral hearing aid for the right and declined at that stage. No aetiology investigation took place other than bloodspot.

At 8 months, VRA sound field testing was normal. No other assessment was performed, listed for 6 month review.

Child is now 15 months old, mum has no concerns about sound reactions however Littleears which you sent out before the appointment suggests he's below expected score.

Where shall we start?

BOA

Distraction

VRA Soundfield

VRA insert

Performance

PTA (with a button)

Does not condition at 65 Soundfield

What now?

Does not condition at 80 Soundfield

What now?

What now?

Case 5

History:

Well baby, passed NHSP

Child is now 2 years 3, mum has no concerns about sound reactions however no speech.

Reports he had some speech and this has regressed around the age of 18 months Has some sensory issues particularly with food

BOA

Distraction

VRA Soundfield

VRA insert

Performance

PTA (with a button)

Does not condition, 'very busy' today

No chance of objective measurements

What now?

Does not condition today

No chance of objective measurements today

What now?

Case 6

History:

Well baby, passed NHSP

Child is now 4 years 2 months, mum has some concerns about hearing, particularly with quiet sounds. Speech is poor (some 2 word sentences) and nursery have raised concerns with speech.

Suggest a next step

BOA

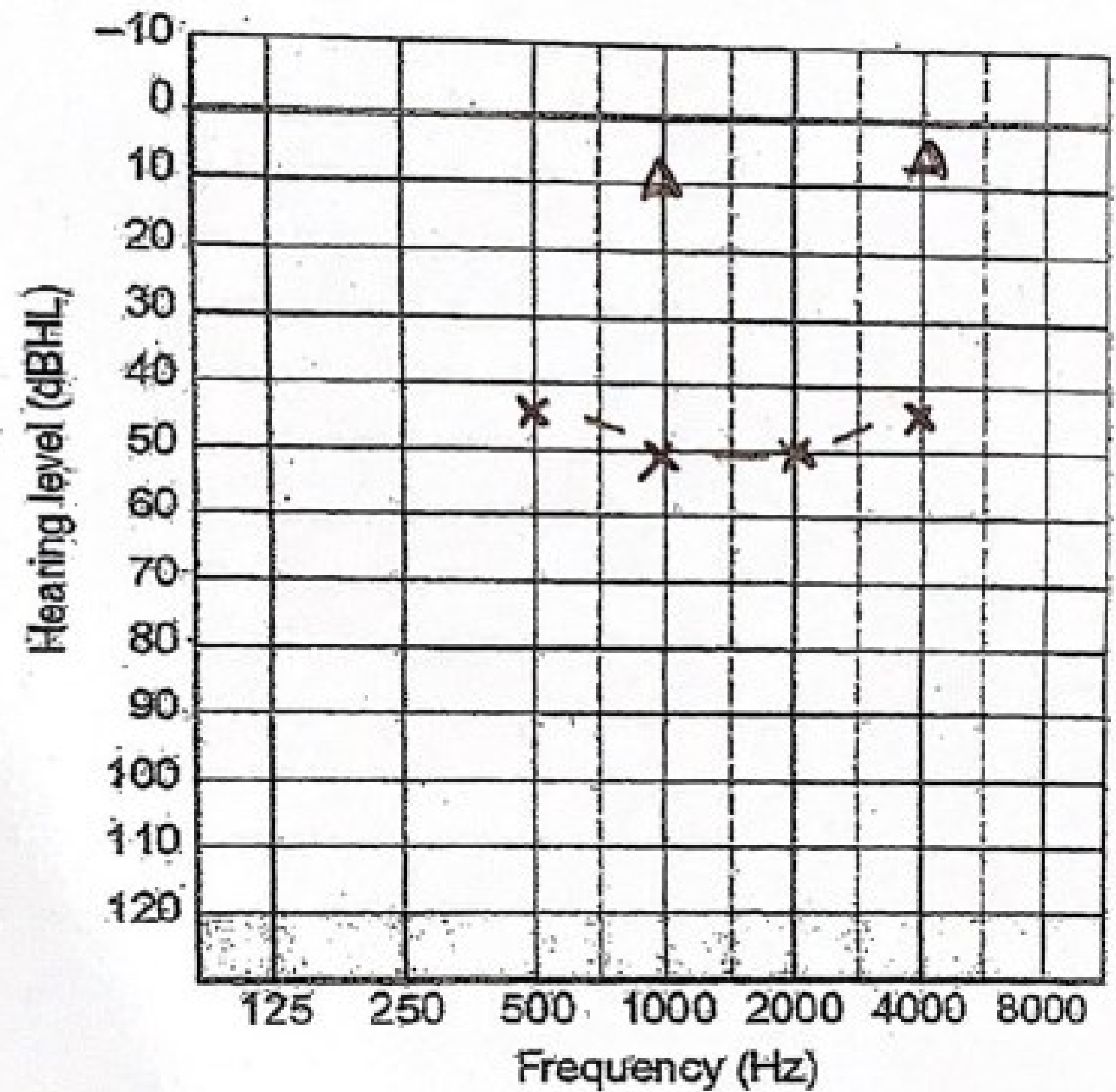
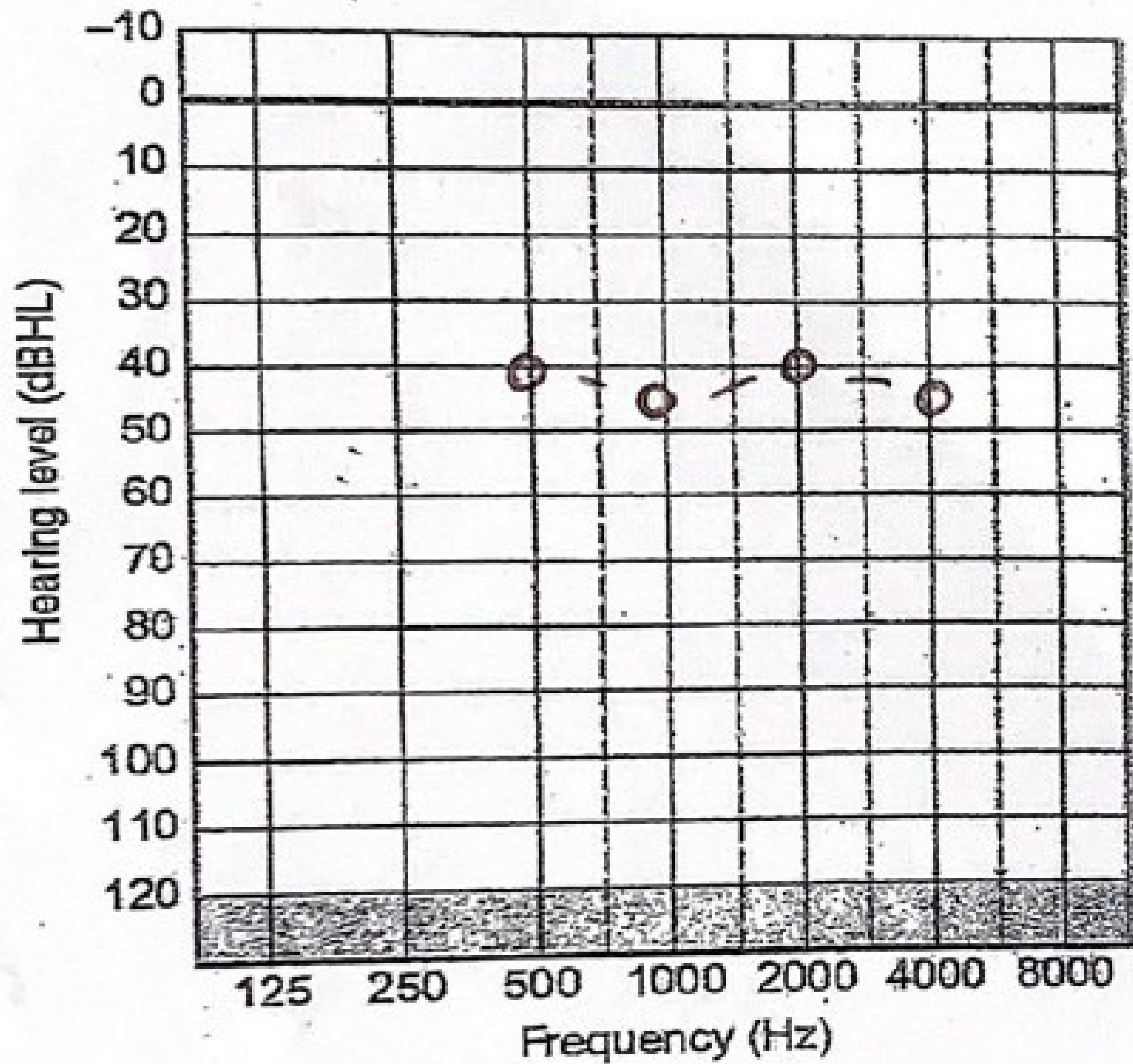
Distraction

VRA Soundfield

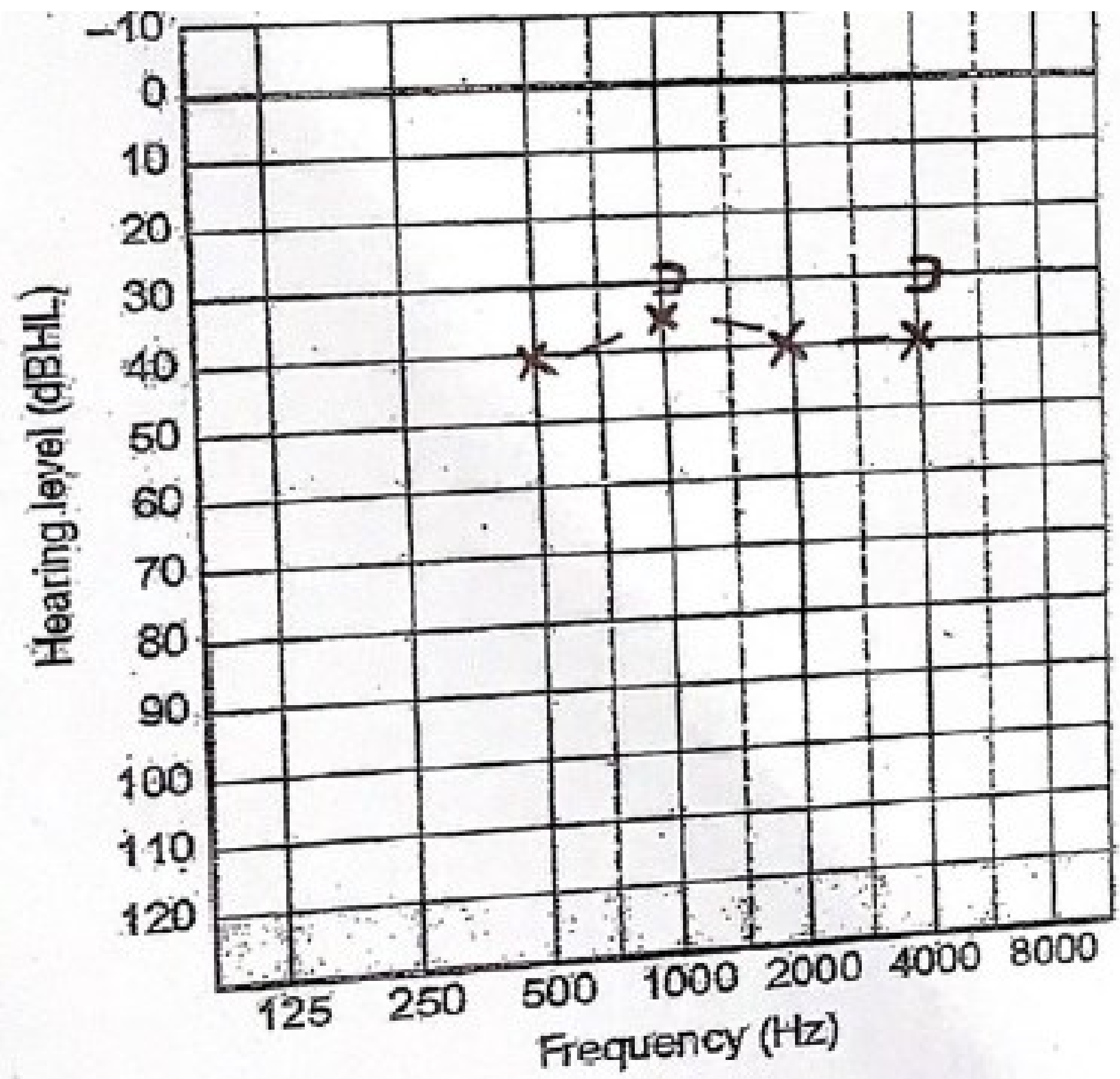
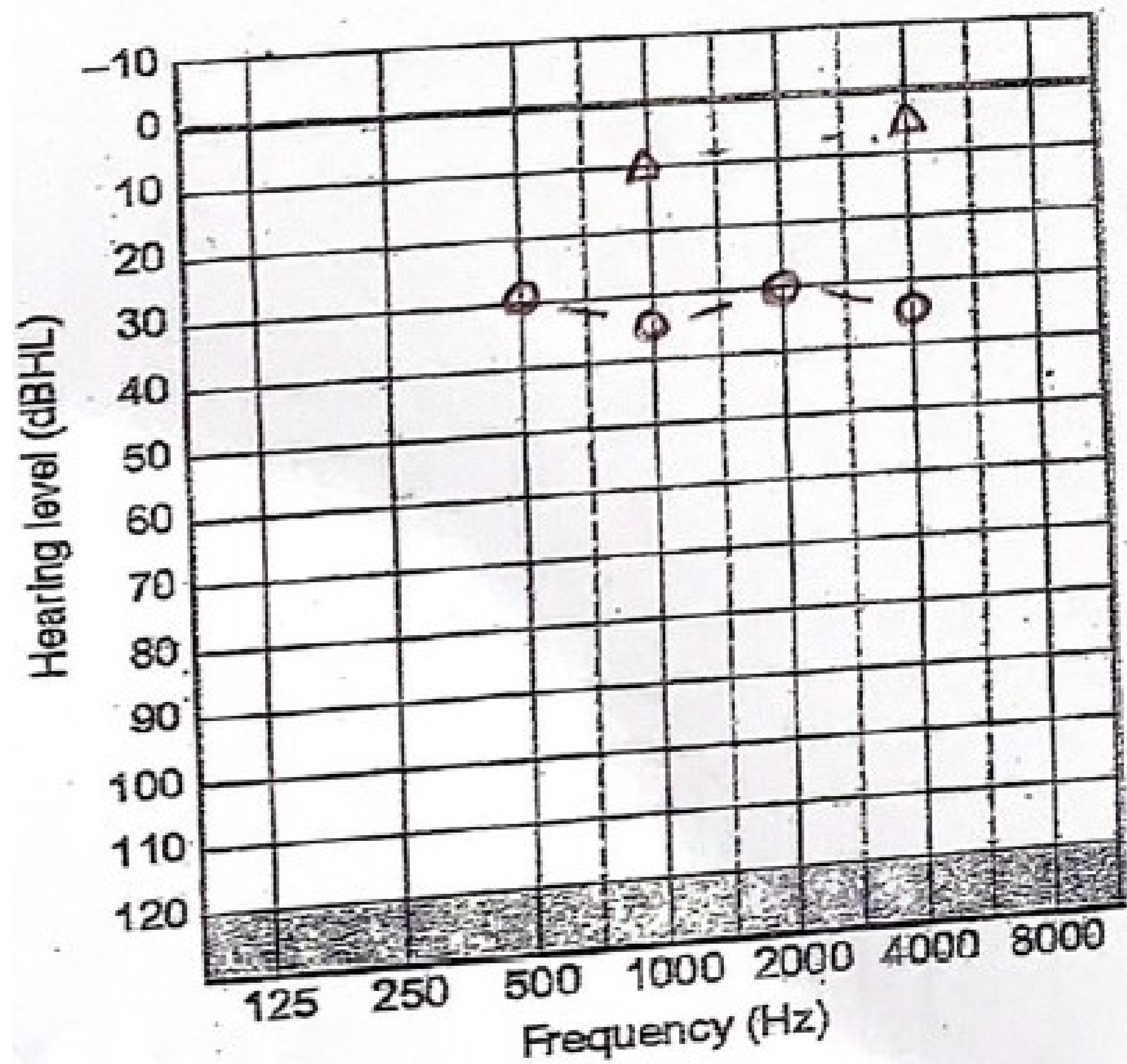
VRA insert

Performance

PTA (with a button)



What now?



Case 7

Please could you see this 18 month old with severe learning and physical disabilities? They have only recently left hospital for the first time since birth following complications from severe hypoxia at birth. They were unable to be screened and ABR testing on the ward has not been possible due to the severe electrical interference on PICU.

BOA

Distraction

VRA Soundfield

VRA insert

Performance

PTA (with a button)