

COMLEX Level 2 PE Exam

**Hearing Loss in 62 years old
male**

Patient Data Sheet

- **Patient Name** : Mr. John Abiola
- **Clinical Settings** : Medicine Office
- **CC** : A 62 years old male presents with hearing loss.

➤ **Vital Signs:**

- **Blood Pressure** : 136/86 mm of Hg
- **Respirations** : 18 per minute
- **Temperature** : 98.6 °F
- **Pulse** : 82 bpm, regular
- **Height** : 69 inches
- **Weight** : 155 lbs.
- **BMI** : 22.9 kg/m²

Differential Diagnosis (DD)

- Presbycusis
- Cerumen Impaction
- Barotrauma
- Due to ototoxic drugs
- Occupational exposure



Key points to remember before entering patient room

- You should have patient's name, Chief Complaint and vitals.
- Please have a Differential Diagnosis before entering room so you can ask specific questions.
- Patient is hard of hearing, don't shout at them.
- Be loud enough, but clear and slow.
- Let them read your lip movements if need be. Explain with actions, if need be.

Opening of the Case

➤ Position of the patient:

- Mostly patient sits on bed, might have his hand on his ear. He will act like he has hearing impairment in left/right/both ears, may ask you to repeat or ask questions loudly.
- Depending upon, site of hearing loss, you can stand/sit near the good ear and ask questions a little louder and confirm if he can hear well.

Subjective:

- (Speak little loudly) Mr. Abiola, Good morning. I am Dr. Kerry. Today I will take care of you. First I will ask you few questions and do brief physical examination. Let me make you little comfortable. (you should drape patient at this time).
- Patient might say “ *Thank you*”, please always reply, such as “*You are welcome*”.
- Now, So tell me what brought you in today?
- *Doc, I have difficulty in hearing for last 6 months.*

Subjective (Contd...)

- **Do you have difficulty in right/left or both ears?**
- *I have more difficulty in right ear.*
- **Over the last 6 months, has it gotten worse or stayed the same?**
- *It is getting worse. Initially it started in right ear, now I have a problem in both ears.*
- **Do you have difficulty in understanding spoken words?**
- *Yes, doc, I have more difficulty while there is background noise such as at restaurants and at my work place.*

Associated complaints and questions of DD

- **Do you have any vertigo? (Meniere's disease)**
- *No doc.*
- **Do you have any nausea/vomiting?**
- *No doc.*
- **Do you have any ear pain?**
- *No.*
- **Any ear discharge ?**
- *No (ear infection).*
- **Any ringing sounds ?**
- *No (Meniere's disease).*

Associated complaints and questions of DD (Contd...)

- **Any recent air travel?**
- *I went to Hawaii last month for vacation (barotrauma).*
- **Any trauma/surgery to ear?**
- *No.*
- **Are you exposed to loud noise at your workplace?**
- *Yes, sometimes as I work as a construction worker.*
- **Do you have any difficulty in walking or maintaining balance?
(associated vestibular problem)**
- *No doc.*

Associated complaints and questions of DD (Contd...)

- **Have you noticed any change in urination?**
- *It's fine.*
- **Is there any change in your bowel movements?**
- *No doc.*

Pam Hugs Foss

➤PMH:

- (You should use transition sentence here.)
- Such as.
- "Mr. Abiola now I would like to ask you few questions about your health in the past."
- Have you had similar complaints in the past?
- *No but, I had right ear infection in childhood.*
- Do you have any medical conditions such as high blood pressure?
- *Yes, I have it for last 10 years.*

Pam Hugs Foss (Contd...)

- **What's the range of your blood pressure? Or Is it under control?**
- *It is around 130/90 mm of Hg. I always take my water pill- HCTZ regularly. (may cause ototoxicity).*
- **Can you tell me dose?**
- *25 mg every morning.*
- **High blood sugar ?**
- *No.*
- **High blood cholesterol?**
- *No.*

Pam Hugs Foss (Contd...)

- **Do you have any history of surgery?**
- *No doc.*

➤ Medications:

- **You mentioned that you take water pill, apart from it, do you take any other pill including OTCs?**
- *ASA 81 mg daily (Aspirin can cause hearing loss only in high dose, such as 3-6 gm/day).*

➤ Allergy:

- **Do you have any allergy to medications or foods?**
- *Penicillin, it causes fever and rash.*

Pam Hugs Foss (Contd...)

➤ Social History:

- I would like to ask you few questions about your social habits.
- Do you smoke?
- *No.*
- Do you drink alcohol?
- *Yes.*
- How many drinks do you drink?
- *I do not drink everyday. 1-2 beers at weekend.*
- Do you take any recreational drugs?
- *Never.*

Pam Hugs Foss (Contd...)

- **Mr. Abiola, Now I would like to ask you few personal questions. I assure you that all information will be kept confidential.**
- **Are you sexually active?**
- *Yes, with my wife only.*

➤ **Family History:**

- **Now, I would like to ask you few questions about health of your family members.**
- **Does any body in your family have similar problem?**
- *Yes, my father had bilateral deafness and he died due to stroke.*
- **I am sorry to hear that.**

Summarization of pertinent points

- (Now, you are done with history. It's time to summarize main pertinent point).
- **Mr. Abiola, I am done with history. Let me summarize for you.**
- **You have difficulty hearing in both ear more on right side that progress gradually over 6 months.**

Challenging Questions

- Do you have any questions?
- *Doc, do you think I will be deaf?*
- Mr. Abiola, I understand your concern. Right now I am in the middle of my evaluation. Once I am done with evaluation, I will tell you what is causing it. I assure you I will try my best to help you.

Points to remember before starting Physical Examination

- Always make patient comfortable.
- Ask permission to examine.
- Do not repeat painful maneuvers.
- Use proper draping techniques.
- Provide help during examination.
- Explain what you are doing.

Focused Objective

- Here, you should focused on CNS examination.
- Start with CNS examination.
- **Audioscopy**-Examine ear by Audioscope, Look for cerumen impaction, Tympanic membrane integrity, EAC.
- Do special hearing tests.

Specific Test

- **Whispered Voice test:** Stand at arm's length behind the patient (to prevent lip reading), and mask hearing in one ear by occluding the ear canal and whisper a short sequence of letters and numbers and ask the patient to repeat them. Repeat on the other side.

Tuning Fork Tests

- **Weber test** — Press the handle of tuning fork to the bridge of the forehead and asking the patient if the sound is louder in one ear or the other.

Type of loss	Weber lateralizes
Conductive loss	
Good ear	No
Bad ear	Yes
Sensorineural loss	
Good ear	Yes
Bad ear	No

Rinne Test

- **Normally $AC > BC$.**
- **Method:** Press the handle of the tuning fork to the mastoid process and ask the patient to tell the examiner when the sound is no longer audible. Then, place the vibrating end of the tuning fork near the external auditory canal. If the patient can again hear the tuning fork, the Rinne test is positive (normal) ($AC > BC$).

Type of Loss	Rinne Test
Conductive loss	
Good ear	$AC > BC$
Bad ear	$BC > AC$
Sensorineural loss	
Good ear	$AC > BC$
Bad Ear	$AC > BC$

Physical Examination:

- Quickly examine cranial nerves, sensory and motor system, nose, eye and throat examination.
- Quickly do RS, CVS and general examination.

How to finish Case

- Once you are done with your physical, give him initial impression and explain your plan.
- Mr. Abiola, thank you for your co-operation. I am done with physical examination. Let me give my impression. Based on your history and my physical examination, It seems that you have hearing loss due to age. But some other conditions also cause such hearing loss. So, to arrive at right diagnosis, I will run some blood tests and order special hearing study called **audiometry (special study that check your hearing)** that gives accurate diagnosis. Once I have result we will meet again in a week and discuss various treatment options.

Contd...

How to finish Case (Contd...)

- **Do you have any questions?**
- *No doc.*
- Shake hands and leave the room.

Assessment and Plan

➤ **Assessment**

1. Presbycusis
2. Cerumen Impaction
3. Barotrauma
4. Due to ototoxic drugs (e.g. Aspirin)
5. Occupational exposure

➤ **Plan**

1. Avoid high dose of NSAID
2. CBC with differential, BMP, Pneumoscropy
3. Pure tone, Speech, Impedence and Evoked Response Audiometry
4. Referral to Audiologist
5. Follow up after a week



Happy Reading