



COMLEX Level 2 PE Exam

**SUDDEN VISION LOSS IN 65 YEARS OLD
MALE**

Patient Data Sheet

- **Patient Name** : Mr. Thomas Jones
- **Clinical Settings** : Emergency Room
- **CC** : A 65 years old male presents with sudden vision loss.

➤ **Vital Signs:**

- **Blood Pressure** : 146/94 mm Hg
- **Respirations** : 12 per minute
- **Temperature** : 97.8 °F
- **Pulse** : 84 bpm, irregular
- **Height** : 68 inches
- **Weight** : 145.2 lbs.
- **BMI** : 22.1 kg/m²

DD: Acute painless visual loss

- Central retinal artery occlusion (CRAO)
- Central retinal vein occlusion (CRVO)
- Cataract (rare to have sudden complete loss)
- Acute open angle glaucoma
- Toxic amblyopia e.g. tobacco or methanol
- Retinal detachment
- Vitreous hemorrhage
- Pressure over visual pathway such as orbital, retinal, pituitary or intracranial tumors or SOLs

DD: Acute painful visual loss

- Trauma to the eye
- Corneal edema
- Keratitis
- Acute attack of angle closure glaucoma
- Ischemic optic neuropathy
- Optic neuritis
- Papilloedema (may be painless)

Anatomical Etiology

- Media problems including pathology in the Cornea, Aqueous humor and Vitreous humor.
- Retinal pathology.
- Neuro-visual problems including those involving the Optic nerve and visual pathways and/or the Visual cortex.

Key information to remember

- Differential diagnosis is very vast.
- Acute visual loss is a frightening experience for patients.
- Many etiologies have a longer term impact.
- Thorough history taking and examination are essential to narrow down the list.

Contd...

Key information to remember (Contd...)

- A focused ophthalmological evaluation including fundoscopy, visual acuity testing for near and distant vision, visual field charting and examination of Cranial nerves must be done.
- A quick CNS exam including motor, sensory and DTR can give valuable clues.
- Do not miss examining other systems as they can point to systemic causes.

ALWAYS ASK FOR

- Onset, duration and progress of symptoms: etiology is very wide.
- Presence of pain along with visual loss .
- Past Medical History : such as DM(long standing and poorly controlled), Hypertension, Afib (esp. pts who are not adequately anticoagulated).
- Occupational exposure such as mining, welding, working with flash lights etc.
- Social habits—esp. Methanol poisoning is a leading cause of amblyopia in some parts of the world.

ALWAYS LOOK FOR

- Visual acuity (near and distant) in both eyes.
- Field of vision in both eyes.
- Intactness of Cranial nerves especially II,III,IV,VI and VII bilaterally.
- Stigmata of smoking and alcoholism.

Subjective

- **Good morning, Mr. Jones, my name is Dr. Li. I am a physician in this hospital and I will take care of you today. What brings you to the hospital this morning ?**
- *Hello doctor (pt. is holding his hand over his right eye) I can't see with my right eye since I woke up this morning.*
- **Oh I see. It is good you came in to see me. I will try to find out what might be the cause and do my best to help you.**
- *Thank you ,doc.*

Contd...

Subjective (Contd...)

- **So, when did this start ?**
- *This morning, doc.*
- **What were you doing at that time ?**
- *Well I had just woken up and I thought the vision on right side was blurry. I thought I was still groggy and went about with my routine. I showered and got ready and it was still blurry but I ignored it. Then I suddenly went blind in that eye.*

Subjective (Contd...)

- **Oh, I see. Do you remember doing anything in particular just before you went suddenly blind? Like having a loud sneeze , or cough or lifting some weight ?**
- *Yes doctor, I sneezed right before it.*
- **I see. Did your vision on the left side also diminish?**
- *No doc, its only the right side.*
- **I see. Did you have any pain in the eye when you went blind?**
- *No doctor.*

Subjective (Contd...)

- **Have you had any watering from the eye?**
- *No doc.*
- **Any headache?**
- *No.*
- **How has the vision been before today ?**
- *Absolutely fine, doctor.*
- **Did your eye or head get hurt recently ?**
- *No doc.*

Subjective (Contd...)

- **Have you noticed any floaters or black spots or deficits in vision lately ?**
- *No doc.*
- **Did you pass out when this happened?**
- *No.*
- **Any numbness or weakness of the arm or leg?**
- *No doc.*

Subjective (Contd...)

- **Any tingling or funny feeling of the face, arm or leg on either side?**
- *No.*
- **Did you throw any fit/ have a seizure?**
- *Not that I know of doc.*
- **Was there any up-rolling of eyes, tongue biting, incontinence of stool or urine ?**
- *No doc.*

PAM HUGS FOSS

- **Okay Mr. Jones, thank you for all that information. Now let's go over your medical problems.**
- *Sure doc.*
- **Do you have any eye problems ?**
- *Well doc, because of my age, I use glasses. Other than that , nothing.*
- **I see. When was the last time you had an eye exam?**
- *I would say more than a year ago, doc.*

Contd...

PAM HUGS FOSS (EYE) (Contd...)

- **I see. And since then you have used the same glasses ?**
- *Yes doc.*
- **Are they reading glasses or for distant vision ?**
- *They are for both, doc.*
- **Do you feel any difficulty in reading or working with these glasses ?**
- *No doc, I think they are perfectly fine.*

PAM HUGS FOSS (EYE) (Contd...)

- **I see. Have you had any watering from the eyes, redness, pain or other symptoms recently ?**
- *No doc.*
- **Were you ever told by your eye doc that you had any cataract changes in the lens?**
- *Not that I remember , doc.*

PAM HUGS FOSS

- **Were you confused soon after this occurred?**
- *No doc.*
- **Thank you for all this information, Mr. Jones. Now let us go over your general health and other medical issues. After I am done with asking you those questions, I will examine you.**
- *Sure doc.*

Contd...

PAM HUGS FOSS (Contd...)

- **Do you have any medical problems?**
- *Yes doc, I am a diabetic since I was 35 and my heart rhythm is irregular. I forgot the name of it. I also have a high blood pressure.*
- **I see. How do your blood sugars run?**
- *They are in the 300-350's.*
- **That is pretty high, Mr. Jones. Do you follow up with your primary doc?**
- *No doc, I haven't seen him in a year.*

PAM HUGS FOSS (Contd...)

- **Well that is not so good. May I ask why ?**
- *Doc I don't have insurance besides I was doing fine.*
- **Well, that is concerning, Mr. Jones. The numbers you just told me are pretty high. You need to take care of your diabetes more aggressively. You know your visual loss could be related to the poor diabetes control.**
- *Oh is that right doc?*
- **Yes, I am afraid it could be.**

PAM HUGS FOSS (Contd...)

- **I understand that insurance is an issue for you, Mr. Jones. But I could connect you to a social worker who could help take care of those issues. Besides these days most common diabetic medications are available as generics at very low costs even to the uninsured.**
- *I see doc. That would be great.*
- **We would go over these issues once I am done seeing you. Right now lets just get back to your general health issues.**

PAM HUGS FOSS (Contd...)

- **Okay. Are you allergic to any medication or food product ?**
- *No.*
- **Are you on any medications currently?**
- *Doc I take insulin and one tablet for diabetes, lisinopril and Metoprolol for blood pressure. I used to take blood thinner for my hearth rhythm but then I stopped as I need to go to clinic almost every week. I don't like that.*

PAM HUGS FOSS (Contd...)

- **I see. Do you take your medications regularly, Mr. Jones?**
- *Well doc I run out sometimes but I try to maintain a good stock of it.*
- **I see. We will discuss this and get you help with it later today.**
- *Thank you doc.*
- **Okay let me ask you about your family's health now.**
- *Sure doc.*

PAM HUGS FOSS (Contd...)

- **Do your family members suffer from any medical conditions?**
- *Doc my father died of a heart attack last year. he was 84. he had diabetes too. My mother has blood pressure. Other than that I don't think there are any problems.*
- **I am sorry to hear about your father. I hope you are aware that having a family history of diabetes and high blood pressure puts you at risk for heart disease too.**
- *I know doc.*

PAM HUGS FOSS (Contd...)

- **Lets review your social habits now.**
- *Sure doc.*
- **Do you smoke ?**
- *Yes doc, I smoke half a pack a day.*
- **I hope you know how risky smoking is for you given your own health and family history.**
- *I know doc.*

PAM HUGS FOSS (Contd...)

- **How long have you smoked?**
- *About 45 years now doc.*
- **As your physician, its my responsibility to ask you have you considered quitting?**
- *Doc I tried but its become a habit now.*
- **What did you do to quit?**
- *I tried the patch and the gum once. Worked for sometime but then I started smoking again.*

PAM HUGS FOSS (Contd...)

- **I see. Its good you tried. I know it is difficult to give up the habit, after so many years of smoking. For some people it takes many tries to give up for good. Would you be willing to try again ? We have a lot of other ways to help you.**
- *Sure doc, I will think about it.*
- **Great. Please keep me posted I would be happy to help you and keep you motivated.**
- *Thanks doc.*

PAM HUGS FOSS (Contd...)

- **Do you drink alcohol ?**
- *Only six packs of beer every weekend doc.*
- **Okay. how about drugs?**
- *No doc I have stayed away from that stuff.*
- **That's good.**
- **Are you sexually active currently?**
- *Yes doc only with my girlfriend.*

PAM HUGS FOSS (Contd...)

- **Do you use protection?**
- *Yes doc, always.*
- **That's great.**
- **Where do you work ?**
- *I am a sales clerk doc and I also work in the night at a janitor. Times are tough doc.*
- **I can understand, Mr. Jones. Like I said, there are cheaper ways to take care of your health.**

Physical Examination

- **Okay Mr. Jones. I am done with asking you questions. Now let me wash my hands and examine you.**
- *Sure doc.*
- Wash your hands.
- Drape the patient appropriately.
- Do a complete ophthalmological examination.
- Do a CNS examination.
- Quickly also examine other systems.
- Explains, offers and performs OMM if indicated.

Closure: Assessment and Plan discussion

- **Thank you for your cooperation, Mr. Jones.**
- **Now lets go over what my initial impressions are. I will explain all the possibilities to you and what we need to do to reach the final diagnosis. If you have any questions at any point, please feel free to interrupt me.**
- *Sure doctor.*
- **So Mr. Jones, you have what we call acute loss of vision which can be frightening.**

Contd...

Closure: Assessment and Plan discussion (Contd...)

- **The causes can be many and we need some tests to confirm the diagnosis. From examining you and from your history, I have some possibilities in mind, which are more likely than others.**
- *Sure doc.*
- **The first possibility is that the retina, that is the layer in the back of your eye, which forms images, is torn and is separated from the other structures of your eye. we call this retinal detachment in medical terms.**

Closure: Assessment and Plan discussion (Contd...)

- *Oh that is terrible, doctor.*
- **Yes it sounds very concerning, Mr. Jones. Good thing is you have come in pretty early and treatment is available.**
- *Thank goodness, doctor.*
- **Sure, but this is just the first possibility. We need to be sure its not something else before we begin treatment.**
- *What else could it be?*

Closure: Assessment and Plan discussion (Contd...)

- **Well given your diabetes and family history of heart disease, a clot in one of the vessels supplying blood to the eye is also highly likely. We need to be sure its not that.**
- *I see. Is that also treatable?*
- **Yes it is.**
- *Thank goodness, doctor. What else can it be ?*
- **It can also be a bleeding inside your eyeball, something called vitreous hemorrhage.**

Closure: Assessment and Plan discussion (Contd...)

- *I see doc. So what is the next step ?*
- **The next step would be to run a few basic labs, especially your blood sugar control , how it is now and how it has been over the past few months.**
- **I would also like you to see an eye doctor, who would examine you more closely and do some specialized tests. He would be able to tell you exactly what it is and how it could be treated.**

Closure: Assessment and Plan discussion (Contd...)

- *I see, what about return of the vision doc?*
- **I would reserve commenting on this right now. The eye doctor would be the best person to talk to about this. I would go by what he has to say.**
- *I see doc. Thank you so much.*
- **You are welcome. I would call the eye doctor and he would be here shortly. we would be communicating about you and please feel free to call me if you have any questions.**

Closure: Assessment and Plan discussion (Contd...)

- **I would like you to visit me again in a week's time. At that time we will work on your insurance issues, getting you back on your diabetic medications, your other health issues and your smoking cessation.**
- *Sure doc. Do I need to take any precautions at this time?*
- **Yes, I would advise you to keep your eyes safe from any trauma, bright light or fluid or water exposure. Please follow what the eye doctor has to say. I hope you get well soon.**
- *Thank you doctor.*
- **Thank you. Take care. We will meet again.**

Assessment and Plan

➤ **Assessment:**

1. Retinal detachment
2. Central retinal vein occlusion
3. Central retinal artery occlusion
4. Vitreous hemorrhage
5. Papilloedema

Plan:

1. Consult Ophthalmologist
2. Fundoscopy, Visual Acuity Testing, Visual Field Charting, Retinoscopy with fluorscein examination, Slit lamp examination
3. CBC, CMP, HbA1c, EKG
4. Laser photocoagulation, Pneumatic Retinopexy for retinal detachment, Coumadin therapy for Afib
5. Smoking cessation and referral to financial counselor for health insurance
6. Follow up with Ophthalmologist and Primary care physician

Happy Reading