Telemedicine PA Interactive Visit – Internal Medicine/Family Medicine- Case #5
Volunteer Packet- Use online form

PA /Evaluators Name_____PA Student Name_____
Date of Visit _____Time of Visit_____ max 30 minutes

Differential Diagnosis……

_____

- Must name a minimum of 3 possible diagnoses and then note #1/"working" diagnosis

1.
2.
3.

Comments:

Exam Technique……

_____

- Please consider both kinesthetic skill and communication of patient instructions.

Comments:

Organization and Flow of Exam……
Comments:

Exam
Appropriateness……

_____

- Please note that class discussion taught that heart, lungs and abdomen are always appropriate as precursory exams

Comments:

Student is prepared for competency demonstrated by having all of their required equipment and being ready to go on time for their scheduled Zoom meeting…… yes no

Student is considered competent by virtue of your clinical Assessment for this case. Yes NO
Comments:
Instructions: Place a check in front of each task that the student accomplished correctly. Do not place a check for any tasks that were forgotten, done partially or incorrect.

<u>Telemedicine Required Identification/Consent/Documentation:</u>
The student:

_____ 1. Introduces themselves to the patient, confirms their identification and credentials, notes their affiliation (Duquesne University), and their location.
_____ 2. Confirms the identity of the patient with 2 unique identifiers and notes their location and address.
_____ 3. Explains the procedural aspects of the telemedicine visit and that it will be conducted in a similar but modified fashion from a clinic-based visit.
_____ 4. Explains the benefits and drawbacks of completing a virtual visit. Offers an alternative face to face visit as a future time if the patient desires.
_____ 5. Assesses equipment being used by the patient (including hardware/software and home medical equipment and documents it.
_____ 6. Explains the cost of the telemedicine visit.
_____ 7. Explains that they have a right to privacy and explains HIPAA changes in regard to ZOOM conferencing.
_____ 8. Asked the patient if he could see and hear with the technology (before asked by the patient).
_____9. Makes any necessary adjustments for technologic issues (coaches the patient to move camera if needed).
_____10. Makes any necessary adjustments for technologic issues (coaches the patient to move camera if needed).
_____11. Verbalizes that they will document the start time and the end time of the encounter.
_____12. Obtains verbal consent to proceed with the encounter.

Interpersonal and Communication Skills
The student:
_____ 1. Builds the relationship (not rushed, introduction, eye contact, attention, empathy, asks how to address)
_____ 2. Establishes the agenda (elicits concerns, agrees upon agenda)
_____ 3. Facilitates understanding (speaks clearly, avoids medical jargon, high priority information)
_____ 4. Summarizes and confirms understanding (summarizes plan, elicits questions, uses teach back)
_____ 5. Shows listening body language (leaning forward, looking at patient)
_____ 6. Uses empathetic techniques (repeat feelings, legitimize concerns)
_____ 7. Appropriately admits uncertainty, and, if applicable, offers to get more information for patient
_____ 8. Voices understanding of patient's context (cost, transportation)
Medical knowledge.
The student:
_____ 15. If applicable- Avoids prescribing antibiotics for the patient's viral symptoms and provides a clear accurate explanation of why antibiotics are not recommended
_____16. Got to the correct diagnosis
_____ 17. Accessed medical history

Use of Technology.

The student

_____18 . Remained patient-centered despite distractions (Keeps the focus of the visit on the patient rather than the technology)

_____19. Was able to use technology to properly get a patient history and physical exam (prompt patient to move forward, or move screen for better visualization)

Comments for the student:

Case 5 – IM/FM
Student Scenario

You are doing a telemedicine consult. Your clinic implemented telemedicine to better serve patients without consistent transportation as well to decrease non-emergent urgent care visits and office visits. You have been asked to complete a telemedicine encounter on this patient to assess his medical status and to develop a plan of care for the patient.

72 y/o frail Female/male who fell and hit in their head 2 days ago after tripping over a throw rug. The patient was seen in the ER after the fall and was sent home without any sign of visible injuries.

You have connected to this patient by mobile phone with assistance by the patient's daughter. The patient and the daughter are at the patient's home.

Work through the case to reach a diagnosis and appropriately manage the patient.

Actor Script Case 5

The Scenario:
CHARACTER: A 72 y/o female/male who is sitting with a daughter on the couch.
DRESS: Casual dress
SETTING: Sitting on couch in private apartment, connecting to your provider (student) via telemedicine from your mobile device to their home device.
Affect: You are the daughter speaking for your parent who reports feeling dizzy and you are worried because your parent seems a bit "confused".
Presentation: Relaxed adult female/male sitting on couch with a blank look.

CHIEF COMPLAINT: "I'm a bit dizzy."
HPI: Patient fell 2 days ago was seen at local ER and discharged home with no apparent injury.
Student will do the checklist for RED FLAGS for Concussion using the SCAT5 Tool.

1. _____**What happened to you? Have you fallen today?**

- *"My Mom/Dad hit their head on the end of the piano 2 days ago. She tripped over the carpet." Patient says, "I don't think so".*

2. _____**Are you feeling dizzy?**

- *She says she is dizzy. But sometimes when I ask, she just looks back at me.*

3._____**Can you tell me what you are smelling right now.**

- *She isn't answering.*

4._____**Do you know where you are right now?**

- *"Yes, I am at Joan's house." If asked who is Joan? Daughter answer's Joan is my sister.*

5._____**Do you know what day it is?**

- *"Yes, its Saturday." The day is Monday.*

6._____ **Do you know what month it is? What year is it?**

- *Yes, it's April I think. 2012.*

7._____ **Did you lose consciousness when you fell?**

- *"I don't think so." Daughter says two days ago she said, "No"*

8._____Is she/he experiencing nausea or vomiting?

- *"No" says patient, daughter says, I don't think so.*

9._____Other symptoms (e.g. Numbness, tingling, visual changes, memory impairment, HA, Etc: NO findings)

Patient reports having a HA, and starts to say, "I want to go home." My hands feel numb, I want to go home."

Student will complete other portions of the SCAT 5 perhaps. Any questions should be answered in the negative or as unremarkable.

Past medical history:

Does the patient have any medical conditions? If so, are they currently managed well?

"Yes, she has AFIB." Say the daughter.

If asked about previous studies or a CT scan in done in the ER… the daughter/son answers "I don't know, she/he said she/he was fine and that is why they sent her home."

Family history:

1._____Any family history of specific medical conditions?

- *There's no illness that runs in my family as far as I'm aware. My mom/dad has been doing pretty well. She goes out a lot and does square dancing on Saturday nights.*

Drug history:

1._____Any regular medication or OTC? Any ASA or blood thinners?

- *"Yes, she takes something for her AFIB but I don't know if it's aspirin or something else." She has other medicines, but I don't know where she keeps them.*

Social history:

1._____Where is the patient currently living? Will there be anyone at home to stay with you?

- *"She lives alone in this apartment. I don't know why she keeps thinking this is Joan's house.*

2._____What is the patient's occupation?

- *Retired former school teacher.*

3._____Smoking history

- *No, she has never smoked that I know of…*

4._____Alcohol history

- *She likes to have "a night cap" in the evening, it's her "get to sleep" better medicine she says….*

5._____Student may ask various other questions. Answer at your own discretion. Do NOT lead away from the appropriate diagnosis.

Show the Student the image while they are doing general inspection.

Physical Exam:

Modified Vital Signs based on patient equipment:
Obtains:
_____ Temperature (*WNL)*
_____ Pulse (*110*)
_____ Respiratory rate (*WNL*)
_____ Blood pressure (*90/70*)
_____ Pain (*3/10*) over the occipital region of the head.
_____ O2 sat if equipment is available and appropriate *NA*

Performs General Inspection: Show the student the picture.

_____ Inspects the scalp and asks daughter/son to evaluate the head for signs of new trauma.
Assess Cognitive status using a screen:
_____CAOx5, MOCA, ETC. (not oriented to place (at Joan's, date 2012, Saturday)
_____Completes gross assessment of cranial nerves using modified techniques if needed.
At this point the student should be considering transport back to ER. If not don't let them get too side-tracked on modified PE.
On General inspection: **(**Ecchymosis noted on right temple with involvement under the right eye**),** the home is clean and tidy from what can be seen. Lots of area carpets noted in the background. Large baby grand piano off in distance.

Modified HEENT Exam:
Eyes: (Ecchymosis noted on right temple with involvement under the right eye**)**
_____ Test visual acuity (WNL)
_____Inspects pupils for size and shape (WNL)
_____ Tests pupil reflexes and accommodation if an assistant is available (WNL)
ENT: (Should not do too much of this portion of the exam)
_____ maneuvers the patient to observe the oral pharynx, asks to stick out their tongue,use a light if one is available, Ask for assistance from someone if available and the patient agrees (*WNL*)

Cardiopulmonary Exam: (WNL)

_____ Auscultates heart and lungs if equipment is available. If not, "asks the patient to take a deep breath in and out" while observing and listening.

Neuromuscular Exam:
_____Assesses neurological deficits in any of the limbs. (if done all DTRs, ROM all WNL)
_____Balance and gait if it can be done safely (**should NOT do**).
_____Sensation assessed using a modified technique. (**should NOT do**).
_____Completes gross assessment of any remaining cranial nerves (unremarkable if done)
_____Assesses motor strength in UE and LE bilaterally by instructing the patient through routine maneuvers. (unremarkable if done)
_____ Elicits DTRs in UE and LE bilaterally if assisted by a caregiver.
_____Accesses balance if safe to do so. (**should NOT do**).

Management: R/O Subdural Hematoma in elderly with hx of head trauma

Head Trauma/ R/O Subdural Hematoma
INJURY ADVICE
This patient has received an injury to the head.
A careful medical examination has been carried out and there appears to be signs which are concerning that she/he may have sustained a significant head injury.

How would you manage this patient?
Explain your differential diagnosis and your plan to have the patient evaluated further.

Advise the patient that: (Circle any noted)

1._____You recommend calling 911 with transport to the ER.
2. _____ Explain the diagnosis and your concern over Subdural hematoma, other differentials
3._____Explain the diagnosis requires a CT scan of the head
4._____Explain the concern of the use of anticoagulants and/ hx of head injury

5._____ Gives ER precautions: The patient should not be left alone and must go to a hospital at once because they are experiencing: confusion, memory loss, HA, numbness and tingling, hx of blood thinners, etc

- The student can offer to assist by calling 911 and giving report to first responders.
- Can assist by calling ahead to the closest medical facility for report.

6._____Plan for F/u next telemedicine visit or clinic visit scheduled for:_____

At which time, home safety measures and a home safety risk assessment will be completed. Offer to provide educational materials regarding the diagnosis.

7. _____ Notes Ending time of Call

8. _____ Mentions post-call survey of both provider and patient.

For more information on Subdural Hematoma:

https://www.health.harvard.edu/a_to_z/subdural-hematoma-a-to-z

Patient Education

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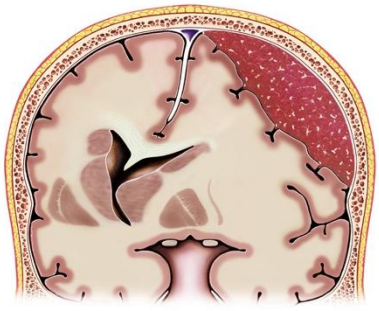
A subdural hematoma occurs when a blood vessel near the surface of the brain bursts. Blood builds up between the brain and the brain's tough outer lining. The condition is also called a subdural hemorrhage.

In a subdural hematoma, blood collects immediately beneath the dura mater. The dura mater is the outermost layer of the meninges. The meninges is the three-layer protective covering of the brain.

A subdural hematoma is a life-threatening problem because it can compress the brain.



Most subdural hemorrhages result from trauma to the head. The trauma damages tiny veins within the meninges.

In young, healthy people, bleeding usually is triggered by a significant impact. This type of impact might occur in a high-speed motor vehicle accident.

In contrast, older people may bleed after only a minor trauma. For example, it might happen from falling out of a chair.

A subdural hematoma is also more common in people:

- Taking medications that thin the blood
- Who abuse alcohol
- Who have seizures

An acute subdural hemorrhage is bleeding that develops shortly after a serious blow to the head. Blood accumulates rapidly, causing pressure to rise within the brain. This can result in loss of consciousness, paralysis or death.

When bleeding develops slowly, it is known as a chronic subdural hemorrhage. Bleeding may develop over a period of weeks to months

This form of bleeding is much more common in older people. The head trauma that causes chronic subdural hemorrhage is often minor. Many of those affected cannot recall a head injury.

Symptoms

Acute subdural hemorrhage usually develops after severe head trauma. Injuries that result in this condition are typically forceful enough to cause a temporary loss of consciousness.

Usually, in the minutes to hours after head injury, the person recovers consciousness. Then, the person gradually loses consciousness again, this time from subdural bleeding.

Other common symptoms of an acute subdural hemorrhage include:

- Severe headache
- Weakness on one side of the body
- Seizures
- Changes in vision or speech

Chronic subdural hemorrhages produce more subtle symptoms. These symptoms may continue for more than a month before the diagnosis is recognized.

These symptoms include:

- Mild headache

- Nausea or vomiting
- Change in personality
- Memory loss
- Loss of balance or difficulty walking
- Double vision
- Weakness, numbness or tingling in arms or legs

The symptoms caused by chronic subdural hemorrhage can mimic other common conditions. For example, they may resemble strokes and brain tumors. Occasionally, the gradual memory loss and personality changes can be mistaken for dementia.

Diagnosis

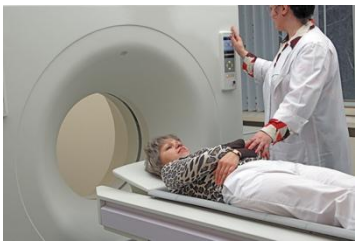
All head injuries should be evaluated promptly by a physician. This is especially true if there has been any loss of consciousness.

- How the injury occurred
- What symptoms developed
- Whether there have been head injuries in the past. (Repeat injuries are more likely to cause serious damage.)
- Whether the person has other medical problems
- What medications the person is taking
- Whether the person has been drinking alcohol or using drugs
- Whether there are symptoms of other injuries (neck pain, shortness of breath, etc.)

The doctor will perform a thorough physical and neurological exam. He or she will check:

- Blood pressure and pulse
- Vision and the way the eyes respond to light
- Reflexes and balance
- Ability to answer questions and remember things

If the doctor suspects bleeding in the head, he or she will order a computer tomography (CT) scan. A CT scan is the best way to determine the location and amount of bleeding. It can also identify any injuries to the brain, skull or neck.



A doctor may suspect a chronic subdural hemorrhage if an older patient develops new neurological symptoms. This is more likely if there has been a fall or minor trauma to the head.

Expected Duration

An acute subdural hemorrhage develops over minutes to hours. If not diagnosed and treated promptly, it can cause severe brain injury and sometimes death.

A chronic subdural hemorrhage develops over many days to weeks. The symptoms may be subtle and develop so slowly that the person and family are not alarmed.

As is the case with any brain injury, symptoms can be slow to go away after treatment. Some symptoms may be permanent.

Occasionally, a subdural hematoma is small enough that you may not need surgery to remove the blood. The blood will be reabsorbed gradually by the body. This process may require a few months. But it is sometimes the safest treatment plan.

Prevention

Accidents, including head injuries, are the leading cause of death in young people. Many of these accidents are related to drugs and alcohol. Many others could be prevented with simple precautions or safety equipment.

To help prevent head injuries:

- If you drink alcohol, drink in moderation. Never drive after drinking or using drugs.
- If your job involves working high above the ground, use approved safety equipment to prevent accidental falls.
- Never work in a high place if you:
  - Feel lightheaded or unsteady
  - Have been drinking alcohol
  - Are taking medication that can make you dizzy or affect your balance

- Have your vision checked regularly. Poor vision can increase your risk of falls and other types of accidents.
- If you are an older adult, clear your home or apartment of hazards that could cause you to trip and fall. These include throw rugs and extension cords.
- If you feel unsteady on your feet, consider using a cane or walker.
- If you play a contact sport such as football and you experience a significant head injury, allow adequate time for healing before you start playing again. After a head injury, complete healing can take up to 15 days. This is true even if symptoms go away much sooner. A repeated head injury during this fragile repair period is likely to result in more bleeding. This is called the second impact syndrome.

"Blood-thinning" medications increase your risk of bleeding within the head. Examples include:

- Aspirin
- Clopidogrel (Plavix) and prasugrel (Effient)
- Heparin
- Warfarin (Coumadin)

Treatment

An acute subdural hemorrhage requires immediate medical attention. In most cases, emergency surgery must be done to drain the hematoma and to control bleeding.

In contrast, only some chronic subdural hemorrhages require emergency surgery. Most physicians will recommend surgery for larger hemorrhages and those that cause neurological symptoms. However, treatment with bed rest, medications and observation may be reasonable in some cases. This may be the case for smaller hematomas that cause minimal or no symptoms.

People who develop a subdural hemorrhage are at risk of seizures. Seizures may occur even after the hematoma has been treated.

When To Call A Professional

Call for emergency assistance if you find someone unconscious at an accident scene.

Also seek immediate attention if someone with a head injury experiences:

- Drowsiness or a decrease in alertness
- Nausea or vomiting
- Confusion or amnesia
- Difficulty walking or poor coordination
- Slurred speech
- Double vision

- Irrational or aggressive behavior
- Seizures
- Numbness or paralysis in any part of the body

Even if a head injury appears minor, with mild symptoms, certain people are at high risk of serious bleeding. Call a doctor or go to an emergency room immediately if a person with head injury also:

- Is elderly
- Takes medications to prevent unwanted blood clots
- Has a bleeding disorder
- Has a history of heavy alcohol use

Prognosis

The outlook for acute subdural hemorrhages generally is poor and some people die even with prompt surgery. Usually there are injuries to other parts of the brain from the trauma. This tends to be true regardless of the size of the hematoma. Many of those who survive may be left with permanent neurological problems.

The prognosis is best in people who:

- Don't lose consciousness or are unconscious for a short period of time
- Have no or few neurological symptoms when evaluated by a doctor
- Are younger than age 50
- Do not abuse alcohol
- Do not have other associated brain injuries
- Receive prompt medical attention
- The prognosis for chronic subdural hemorrhage is quite favorable. Most people are able to resume normal functioning.
- The prognosis is best in those who, at the time of evaluation:
- Are awake Are alert
- Have no or few neurological symptoms

Additional Info

National Institute of Neurological Disorders and Stroke
http://www.ninds.nih.gov/

Allergy & Asthma Network Mothers of Asthmatics (AANMA)
http://www.allergyasthmanetwork.org/

American Association of Neurological Surgeons
http://www.neurosurgerytoday.org/

Brain Injury Association of America
http://www.biausa.org/