Telemedicine PA Interactive Visit – Internal Medicine/Family Medicine- Case #8
Volunteer Packet- Use online form

PA /Evaluators Name_____ PA StudentName_____
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 8 – 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 office visits. You have been asked to complete a telemedicine encounter on this patient to assess her medical status and to develop a plan of care for the patient.

A 67-year-old women or man reports noticing that the patient's hands are numb every morning when the patient wakes up. Sometimes the feeling wakes the patient up in the middle of the night.

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

Actor Script Case 8

The Scenario:
CHARACTER: Helen/Howard Jones, 67 y/o
DRESS: Casual, you are at home
SETTING: At your home, connecting to your provider (student) via telemedicine from your home device to their home device.
Affect: Relaxed and calm
Presentation: A 67-year-old women or man reports noticing that their hands are numb every morning when they wake up, sometimes the feeling wakes the patient up in the middle of the night.

CHIEF COMPLAINT:
"I woke up this morning and I just couldn't take it any longer. My hands are constantly feeling like they are falling asleep.

HPI: No additional background given.

1. _____When did the patient notice the numbness?

   It started about a month ago. I had been sewing masks for my friends and neighbors. It was shortly after that I first started noticing it.

2. _____How long have you been sewing?

   I started sewing years ago but I stopped. I used to sew quilts, but I lost interest. When Coronavirus hit, I decided it was time to dust off the old sewing machine.

3. _____Can you describe the numbness?

   It is just like when your hands or feet fall asleep. My hands feel numb. I can't feel them, I shake then and it's like pins and needles. But it is so aggravating!

   Distribution includes the median nerve territory, with involvement of the first three digits and the radial half of the fourth digit. You can show the student on your own hand.

   The pain and paresthesia is localized to the wrist and involves the hand. It is not uncommon for sensory symptoms to radiate proximally into the forearm, and less frequently to radiate above the elbow to the shoulder, but the neck is not affected.

4. _____Are you having any other symptoms?

   No. No other issues but my hands. Both of my hands are driving me crazy.

5. _____Is there anything that makes it better or worse?

   Well, if seems better if I shake my hands or move them around.

6. _____Does the patient have any weakness or sensory disturbance elsewhere?

   I've got no weakness in my arms or legs and the sensation everywhere is totally fine.

7. _____Is there any history of trauma?

   I haven't experienced any trauma. No but I do feel like I drop things like my pen or my coffee cup.

8. _____Is there any recent history of illness?

   I haven't had any infections recently

9. _____Has the patient ever experienced anything similar in the past?

   NO, I've never experienced anything like this before!

Past medical history/SH

- _____Previous similar episodes
- _____Any recent infections
- _____History of stroke or transient ischemic attack
- _____Neurological conditions
- _____Thromboembolic disease
- _____Cardiovascular risk factors:
- _____Hypertension (+)
- _____Diabetes (I have been told I have to watch my sugar but I don't have diabetes)
- _____Hypercholesterolemia
- _____Smoking
- _____ Worked as a receptionist for years and later worked typing legal briefs. Now retired.

"I don't have any medical conditions; But I was told I may have pre-diabetes. I take cinnamon for it. I sometimes I have high blood pressure but I just watch my salt intake and exercise- it keeps it under control.

Family history

- _____Stroke
- _____Other neurological conditions

There's no family history of any strokes or any other medical problems."

Drug history

- _____Antiplatelets or anticoagulants
- _____Other regular medication
- _____Recreational drug use
- _____ETOH (I do drink a glass of wine if I can't fall asleep.)

I've never taken any recreational drugs and I don't smoke.

Physical Exam:
Show picture to student:

_

Modified Vital Signs based on patient equipment:
Obtains:

_____ Temperature (*WNL)*
_____ Pulse (*WNL*)
_____ Respiratory rate (*WNL*)
_____ Blood pressure (*WNL*)
_____ Pain (*0/10*)
_____ O2 sat if equipment is available and appropriate *NA*

Performs General Inspection: Show the Student the image while they are doing general inspection.

Assess Cognitive status using a screen:
_____CAOx5, MOCA, ETC. (wnl)
Modified HEENT Exam:
Eyes: (*WNL*)
_____ Inspects pupils for size and shape
_____ Tests pupil reflexes and accommodation if an assistant is available
_____ Performs extra-ocular movement testing
_____ Assesses for nystagmus- HINTS exam
ENT: (*WNL*)
_____ Inspects external ears for deformities if able
_____ Can they hear normal speech?
_____ Ear canal /TMs if patient has equipment available Tytocare or similar.
_____ Inspects external nose and internal nares.
_____ Inspects oral mucosa and posterior pharynx with camera if available
_____Assesses speech, "You can't teach an old dog new tricks".

Cardiopulmonary Exam: (WNL)
_____ Auscultates heart and lungs if equipment is available. for rate, rhythm and heart sounds

Neuromuscular Exam:

Sensation is normal throughout all areas with the exception of the distribution of the median nerve of the hand.

_____ Completes gross assessment of cranial nerves
_____Grossly examines the hands for deformity
_____ Assesses motor strength in UE and LE bilaterally by instructing the patient through routine maneuvers.
_____ Elicits DTRs in UE and LE bilaterally if assisted by a caregiver.
_____ Assesses ROMs _____Assesses sensation by asking helper to gently touch parts of the patient's hand with a toothpick while the patients eyes are closed.

_____ Tinel test (+) properly instructs patient /helper with these maneuvers.
_____ Phalen's (+)

Neuromuscular Findings:

- ***There are not gross deformities of the joints of the hand.***
- ***Pain is elicited by testing and tapping in the area of the median nerve of both hands. Sensation is decrease over the distribution of the median nerve and there is obvious flattening of the thenar eminence.***
- ***Hand grip is deceased bilaterally by report.***

View/Print Figure

Predicting the Outcome of Conservative Treatment for Carpal Tunnel Syndrome

*Score 1 point for each "yes" answer and zero for each "no" answer. See the scoring key for the predicted successful outcome of conservative treatment.**

1. Have symptoms been present for more than 10 months?	Yes ____	No ____
2. Does the patient have constant paresthesias?	Yes ____	No ____
3. Does the patient have flexor tenosynovitis ("triggering" of the digits)?	Yes ____	No ____
4. Is Phalen's maneuver positive within less than 30 seconds?	Yes ____	No ____
5. Is the patient older than 50 years?	Yes ____	No ____

SCORING KEY: zero points = 65% success rate; 1 point = 41.4% success rate; 2 points = 16.7% success rate; 3 points = 6.8% success rate; 4 or 5 points = 0% success rate.

**—Outcome rates are based on the use of wrist splinting and nonsteroidal anti-inflammatory drugs; success rates may be higher with oral corticosteroid therapy or local corticosteroid injection.*

FIGURE 2.

An approach to predicting the outcome of conservative treatment in patients with carpal tunnel syndrome.

Adapted with permission from Kaplan SJ, Glickel SZ, Eaton RG. Predictive factors in the non-surgical treatment of carpal tunnel syndrome. J Hand Surg [Br] 1990;15:108.

Student reviews the screening tool for success of conservative management for Carpal Tunnel Syndrome with the patient.

DX and Management: Carpal Tunnel Syndrome

How would you manage this patient?

Reassurance and advice

- _____ Reassure the patient that the prognosis is good: most people with Carpal Tunnel syndrome recover with proper treatment and care. After reviewing the tool is appears this patient may have a positive outcome with conservative management only.

Advise the patient that: (Circle any noted below)

1._____Stop repetitive motion behaviors (in this case sewing or typing).

- Patients with carpal tunnel syndrome should avoid repetitive wrist and hand motions that may exacerbate symptoms or make symptom relief difficult to achieve.
- If possible, they should not use vibratory tools (e.g., jackhammers, floor sanders), because the motion of these tools can make their symptoms worse.
- Ergonomic measures to relieve symptoms depend on the motion that needs to be minimized.

2._____Patients who work on computers, for example, may benefit from improved wrist positioning or the use of wrist supports, although the latter is controversial. Wrist splints may be helpful for patients in other professions that require repetitive wrist motion.

3._____In addition to wrist splinting may be consider. Student may make a recommendation for this.

4._____OTC medications for pain including NSAIDS at proper dosage can be recommended.

*5.*_____ *Corticosteroids*

- Treatments include oral corticosteroid therapy and local corticosteroid injections.
- Approximately 80 percent of patients with carpal tunnel syndrome initially respond to conservative treatment; however, symptoms recur in 80 percent of these patients after one year

6._____Surgery should be considered when carpal tunnel syndrome does not respond to conservative measures.

- Gives ER precautions: Although it is unlikely that this issue will require emergency treatment the student should offer routine ER precautions for any SOB, CP, change in neurological function especially any addition loss of function, slurred speech, limb involvement, call 911.

Plan for F/u next telemedicine visit or clinic visit scheduled for :_____

_____ Notes Ending time of Call

_____ Mentions post call survey of both provider and patient.

How is carpal tunnel syndrome treated?

Treatments for carpal tunnel syndrome should begin as early as possible, under a doctor's direction. Underlying causes such as diabetes or arthritis should be treated first.

Non-surgical treatments

- *Splinting*. Initial treatment is usually a splint worn at night.
- *Avoiding daytime activities that may provoke symptoms*. Some people with slight discomfort may wish to take frequent breaks from tasks, to rest the hand. If the wrist is red, warm and swollen, applying cool packs can help.
- *Over-the-counter drugs*. In special circumstances, various medications can ease the pain and swelling associated with carpal tunnel syndrome. Nonsteroidal anti-inflammatory drugs (NSAIDs), such as aspirin, ibuprofen, and other nonprescription pain relievers, may provide some short-term relief from discomfort but haven't been shown to treat CTS.
- *Prescription medicines.* Corticosteroids (such as prednisone) or the drug lidocaine can be injected directly into the wrist or taken by mouth (in the case of prednisone) to relieve pressure on the median nerve in people with mild or intermittent symptoms. (Caution: individuals with diabetes and those who may be predisposed to diabetes should note that prolonged use of corticosteroids can make it difficult to regulate insulin levels.)
- *Alternative therapies*. Acupuncture and chiropractic care have benefited some individuals but their effectiveness remains unproved. An exception is yoga, which has been shown to reduce pain and improve grip strength among those with CTS.

Surgery

Carpal tunnel release is one of the most common surgical procedures in the United States. Generally, surgery involves severing a ligament around the wrist to reduce pressure on the median nerve. Surgery is usually done under local or regional anesthesia (involving some sedation) and does not require an overnight hospital stay. Many people require surgery on both hands. While all carpal tunnel surgery involves cutting the ligament to relieve the pressure on the nerve, there are two different methods used by surgeons to accomplish this.

- *Open release surgery*, the traditional procedure used to correct carpal tunnel syndrome, consists of making an incision up to 2 inches in the wrist and then cutting the carpal ligament to enlarge the carpal tunnel. The procedure is generally done under local anesthesia on an outpatient basis, unless there are unusual medical conditions.
- Endoscopic surgery may allow somewhat faster functional recovery and less postoperative discomfort than traditional open release surgery but it may also have a higher risk of complications and the need for additional surgery. The surgeon makes one or two incisions (about ½ inch each) in the wrist and palm, inserts a camera attached to a tube, observes the nerve, ligament, and tendons on a monitor, and cuts the carpal ligament (the tissue that holds

joints together) with a small knife that is inserted through the tube. Following the surgery, the ligaments usually grow back together and allow more space than before. Although symptoms may be relieved immediately after surgery, full recovery from carpal tunnel surgery can take months. Some individuals may have infections, nerve damage, stiffness, and pain at the scar. Almost always there is a decrease in grip strength, which improves over time. Most people need to modify work activity for several weeks following surgery, and some people may need to adjust job duties or even change jobs after recovery from surgery.

Recurrence of carpal tunnel syndrome following treatment is rare. Less than half of individuals report their hand(s) feeling completely normal following surgery. Some residual numbness or weakness is common.

How can carpal tunnel syndrome be prevented?

At the workplace, workers can do on-the-job conditioning, perform stretching exercises, take frequent rest breaks, and use correct posture and wrist position. Wearing fingerless gloves can help keep hands warm and flexible. Workstations, tools and tool handles, and tasks can be redesigned to enable the worker's wrist to maintain a natural position during work. Jobs can be rotated among workers. Employers can develop programs in ergonomics, the process of adapting workplace conditions and job demands to the capabilities of workers. However, research has not conclusively shown that these workplace changes prevent the occurrence of carpal tunnel syndrome.

For more information on Capral Tunnel Syndrome review this article in American Family Physician.

https://www.aafp.org/afp/2003/0715/p265.html