



**Telemedicine PA Interactive Visit–
PEDS Case 3: Child with N,V and Abd pain**

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:

Case 3 – PEDS
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 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.

12 y/o male/Female (age dependent on volunteer) who reports having nausea and vomiting for the past six hours accompanied by abdominal pain.

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

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



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 incorrectly. Use the online form to submit the report. Once submitted you may dispose of this paper copy.

Telemedicine Required Identification/Consent/Documentation:

The student:

- _____ 1. Introduces themselves to the patient, confirms their identification and credentials, notes their affiliation, 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 (instructs the patient to move camera when and if needed).
- _____ 10. Makes any necessary adjustments for technologic issues (coach the patient to move camera when and 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, Includes the Four Habits.

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. Summarize and confirm understanding (summarizes plan, elicits questions, uses teach back)
- _____ 5. Showed listening body language (leaning forward, looking at patient)
- _____ 6. Used empathetic techniques (repeat feelings, legitimize concerns)

_____ 7. Appropriately admitted uncertainty, and, if applicable, offered to get more information for patient

_____ 8. Voices understanding of patient's context (cost, transportation)

Actor Script

The Scenario:

CHARACTER: A 12 (use alternate age for volunteer if needed) y/o male/female who is sitting with a parent on the couch.

DRESS: Casual dress

SETTING: Sitting on couch in private home, connecting to your provider (student) via telemedicine from your mobile device to their home device.

Affect: You are the parent who is speaking for your son/daughter who is sitting on the couch holding their stomach.

Presentation: Child is in discomfort, you adult female/male sitting on couch upset about your child.

CHIEF COMPLAINT: "I feel sick."

HPI: Patient had acute episode of abdominal pain 2 days ago which came on abruptly and lasted approximately 3 hours. Pain was "really bad" and I thought about taking her to the doctor but is suddenly subsided. I thought it was gas pains.

Today they seemed to feel fine. Then shortly after lunch he/she started to feel nauseated and they threw up.

1. _____ **How are you feeling today?**

- *"As I said, the day started out fine, He/she ate lunch, slice of left over pizza and about an hour later they started to feel nauseated".*

2. _____ **Are you feeling nauseous now?**

- *Yes, it comes and goes. S/he starts to feel it and then throws up, then it seems to be better for a short bit and then it gets worse again.*

3. _____ **Are you having any pain? Type of pain etc?**

- *Yes, child reports the pain is “all over my stomach”. It started in the middle of my stomach but now it seems all over. It keeps moving around. If I sit still and bend over it feels better. I keep feeling like I have to go to the bathroom. I run in there and I can’t go or I almost go and that seems to help it for a bit.*

4._____ **How bad is the pain? Rate it (0-10) scale.**

- *“It’s really bad, would say when it gets bad, it’s about a 9 or 10. Child points to sad face on visual pain scale.*

5._____ **Have you had pain like this before?**

- *“Yes, just the other day. It started all of a sudden and lasted a few hours, I thought I was gonna die then it stopped. Just like that. I thought it was gas pains.”*

6._____ **Other symptoms**

Key gastrointestinal symptoms:

No Dysphagia/odynophagia

Yes-Nausea / vomiting – no triggers/ color of vomit (green) / hematemesis none.

Reduced appetite **(yes)**/ weight loss **(none)**

Gastroesophageal reflux **(none)**

- Abdominal pain – SOCRATES- Site – *where is the pain*
- Onset – *when did it start? / sudden vs gradual?*
- Character – *sharp / dull ache / burning*
- Radiation – *does the pain move anywhere else?*
- Associations – *other symptoms associated with the pain*
- Time course – *worsening / improving / fluctuating / time of day dependent*
- Exacerbating / Relieving factors – *does anything make the pain worse or better?*
- Severity – *on a scale of 0-10, how severe is the pain?*

Yes severe, all over, maybe more on the left I don't know. Sharp when it's bad, then all over, Was in the middle now all over, maybe on the side, I don't know.

Abdominal distension (I don't think so, maybe)

Altered bowel habit – (yes, as noted) constipation (Yes, I feel like I have to go but then I can't)/ diarrhea (**Yes at first**) / fresh blood (no) / melaena (no)

Systemic symptoms – jaundice (no) / fever (99.7)/ malaise (no) / fatigue (no, it hurts too bad)

Student will complete other portions of the PMH, FM, SH, ROS perhaps. Any questions should be answered in the negative or as unremarkable.

Past medical history

Gastrointestinal disease – *None*

Other medical conditions- *Nope, well I got dehydrated and they thought I passed a kidney stone once but I never saw it.*

Surgical history –*Nope*

Any recent hospital admissions? – *Nope*

Travel history- *nope*

Drug history

Gastrointestinal medications:

- Pepto bismol, but is hasn't helped much.
- No other meds.

ALLERGIES? **no**

Family history- *unremarkable.*

Social history- unremarkable

Diet:

- **You know the regular stuff**

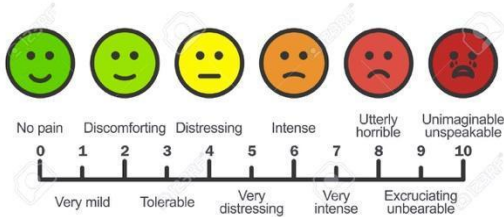
Physical Exam:

DDx Must include –

Modified Vital Signs based on patient equipment:

Obtains:

- _____ Temperature (*99.7 f*)
- _____ Pulse (*110*)
- _____ Respiratory rate (*WNL*)
- _____ Blood pressure (*110/70*)
- _____ Pain (*9/10*) or use visual pain scale with sad face.



_____ O2 sat if equipment is available and appropriate *NA*



Performs General Inspection: Show the student the picture.

Assess Cognitive status using a screen:

_____ CAox5, MOCA, ETC. (*wnl*)

On General inspection: (Child frequently bending over holding stomach knees bent), the home is clean

Modified HEENT Exam: (WNL)

Asks patient to assess mucous membranes

_____ *Moistness of mucus membranes appreciated.*

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.

Modified Abdominal Exam:

_____ **Auscultation (if available)**

_____ **light and deep palpation**

Asks patient to listen to abdominal sounds, reports gurgling associated with hunger.

Asks patient to press on abdomen- patient able to do so without guarding and reports some relief with compression.

(Use parent to assist if possible). Student needs to instruct the Patient and Parent through the maneuvers.

_____ Unable to jump or stand on one foot, unable to hop causes pain.

_____ Contour normal

_____ Hyperactive bowel sounds can be heard audibly if listening. Can instruct with stethoscope if someone has one.

_____ Instruct the parent through palpation. + RLQ tenderness, + rebound

Neuromuscular Exam: (wnl)

Skin: (WNL)

Management: R/O Acute Appendicitis/ acute abdomen (urgent/emergent)

How would you manage this patient?

Explain your differential diagnosis to the parent and your plan to have the patient evaluated further.

- [gastroenteritis](#)
- urinary tract infection
- ectopic pregnancy
- [Crohn's disease](#)
- [kidney stones](#)

Advise the patient that: (Circle any noted)

1. _____ You recommend calling 911 with transport to the ER. If family declines 911, document it, and explain that it is against medical advice.
2. _____ Explain the diagnosis and your concern over acute appendicitis and acute abdomen, explain other differentials.
3. _____ Explain that diagnosis requires a CT scan of the abdomen and possible surgery.
4. _____ **Gives ER precautions:** The patient should not be left alone and must go to a hospital at once because they are experiencing: signs and symptoms of acute abdomen.

- The PA 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.

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

At which time, post-surgical management and transitions of care will be discussed.

7. _____ Notes Ending time of Call

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

Patient Education- How is appendicitis treated?

When you meet with the doctor, they'll perform a physical exam and ask you questions about your symptoms. They'll also order certain tests to help them determine if you have appendicitis. These may include:

- blood tests to look for signs of an infection
- [urine tests](#) to check for signs of a [UTI](#) or a [kidney stone](#)
- an [abdominal ultrasound](#) or [CT scan](#) to see if the appendix is inflamed

If your doctor diagnoses you with appendicitis, they'll then decide whether or not you need immediate surgery.

You'll likely receive antibiotics before surgery. The medications will help prevent an infection from developing after surgery.

Your surgeon will then perform surgery to remove your appendix. This is called an [appendectomy](#).

Your surgeon may perform an open appendectomy or a laparoscopic appendectomy. This depends on the severity of your appendicitis.

Open appendectomy

During an open appendectomy, your surgeon makes one incision in the lower right side of your abdomen. They remove your appendix and close the wound with stitches. This procedure allows your doctor to clean the abdominal cavity if your appendix has burst or if you have an abscess.

Laparoscopic appendectomy

During a laparoscopic appendectomy, your surgeon will make a few small incisions in your abdomen.

They'll then insert a laparoscope into the incisions. A laparoscope is a long, thin tube with a light and camera at the front. The camera will display the images on a screen, allowing your doctor to see inside your abdomen and guide the instruments.



When they find your appendix, they'll tie it off with stitches and remove it. They'll then clean, close, and dress the small incisions.

After surgery

After the surgery, your doctor may want you to stay in the hospital until your pain is under control and you're able to consume liquids.

If you developed an abscess or if a complication occurs, your doctor may want you to stay on antibiotics for another day or two.

It's important to remember that while it's possible for problems to arise, most people make a full recovery without complications.

Risk factors and prevention

According to the [National Institute of Diabetes and Digestive and Kidney Diseases](#), in the United States, appendicitis is the most common cause of [abdominal pain](#) that leads to surgery. About 5 percent of Americans experience appendicitis at some point in their lives.

Appendicitis can happen at any time, but it most often occurs between the ages of 10 and 30. It's more common in men than in women.

You can't prevent appendicitis, but there are steps you can take to lower your risk.

Appendicitis seems less likely if you have a diet rich in [fiber](#). You can increase your fiber intake by eating a healthy diet that contains lots of fresh fruits and vegetables. Foods that are particularly high in fiber include:

- raspberries
- apples
- pears
- artichokes
- green peas
- broccoli
- lentils
- black beans
- bran flakes
- barley
- oatmeal
- whole-wheat spaghetti

Increasing the amount of fiber in your diet can prevent constipation and subsequent stool buildup. Stool buildup is the most common cause of appendicitis.

If you have any condition that causes inflammation or infection of the bowels, it's important to work with your doctor to prevent appendicitis. Always seek medical attention immediately if you or someone you know has symptoms of appendicitis.

FEEDBACK:

Medically reviewed by [Tyler Walker, MD](#) on April 18, 2016 — Written by Ann Pietrangelo and Rachel Nall

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