OSCE Case:

Case scenario:
38 y/o female with a past medical history of hypertension, presents at the urgent care with a complaint of vomiting and fever for 2 days.

History elements

- Setting: urgent care
- No abdominal pain
- Fever at home was 101T Max
- Took tylenol and helped with the headache and fever
- Last dose of tylenol taken 3 hours ago
- Vomited 3-4 times a day after every meal
- Vomit has no blood or green mucus, describes it as yellow
- Unable to keep any food in, throws up about 10 mins after
- Last meal was last night due to loss of appetite
- Also experiencing diffused, intermittent headaches, but not severe
- Sexually active with husband, does not use barrier methods, IUD in place
- Pt is currently menstruating, day 3/5
- No new foods or recent travel
- No dysuria, urinary frequency or urgency, genital pruritus, diarrhea, constipation, body aches, SOB or chest pain

Past medical history:

- **Medical history:** Hypertension
- **Medications**:
    - Metoprolol Succinate 50 mg
- **Surgical history:**
    - 2 C-sections 2012 and 2019.
    - Leg surgery in 01/2023
- **Family history:**
    - Father (68) and mother (64), Alive and well
    - 3 sons, alive and well
    - No history of cancer in the family or heart conditions
- **Social history:**
    - Does not drink alcohol, smoking or illicit drug use
- **Allergies:**
    - None

Review of systems:
General – **Admits to fever and loss of appetite**. Denies fatigue, recent weight loss or gain.
Skin, hair and nails – Denies rash, pruritus, changes in texture, excessive dryness or sweating or changes in hair distribution.
Head – **Admits to headache.** Denies head trauma, dizziness and vertigo.
Eyes – Denies blurring, lacrimation and pruritus.
Ears – Denies deafness, pain, discharge or use of hearing aids.
Nose/Sinuses – Denies congestion, obstruction or bleeding.
Mouth and throat – Denies sore throat, voice changes and use of dentures.
Neck – Denies localized swelling/lumps or stiffness/decreased range of motion.
Pulmonary System – Denies cough, dyspnea and wheezing
Cardiovascular System – Denies chest pain, palpitations, syncope, feet or ankle edema and known heart murmur.
Gastrointestinal System – **Admits to loss of appetite and vomiting**. Denies abdominal pain, constipation, diarrhea and nausea.
Genitourinary System – Denies urinary frequency, urgency and dysuria
Musculoskeletal System – Denies pain, trauma, bleeding, deformities or swelling.

Physical Exam
Vitals: BP: 129/84 (LT arm, seated), RR: 16/min, unlabored, P: 77 beats/min, regular, T: 99 degrees F (oral), O2 Sat: 98% Room Air
Height : 68 inches
Weight: 197 lbs.
BMI: 29.9

General: Alert and oriented, not in acute distress, well nourished, dressed appropriately for the weather
Cardiovascular: Regular rate and rhythm. S1 and S2 are distinct, no murmurs, S3 or S4.
Lung: Breath sounds are clear bilaterally, no wheezing, rhonchi or rales. Chest expansion and diaphragmatic expansion are symmetrical.
Gastrointestinal: Bowel sounds normoactive in all four quadrants on auscultation. Tenderness to light palpation of the right lower quadrant, no rebound, guarding, negative rovsing, obturator and all other quadrants are non-tender. No lesions, masses, swelling, or discoloration noted on inspection. No CVA or flank tenderness.
Neuro: Alert and oriented x3. Pleasant and cooperative.

Differential Diagnosis:
Appendicitis: This condition is characterized by abdominal pain that starts around the umbilical area and then shifts to the right lower quadrant. Although the patient does not have abdominal

pain, this could be an atypical presentation. The patient also has a fever and nausea/vomiting, which are symptoms of appendicitis due to infection or inflammation. During the physical exam, tenderness in the right lower quadrant is highly suggestive of appendicitis since that is where the appendix is located. Aspects of the HPI that can rule out appendicitis are the lack of abdominal pain and negative obturator, psoas, and Rovsing signs, as well as negative leukocytes. However, these indicators do not always need to be positive for the patient to be diagnosed with appendicitis.

Gastroenteritis (Stomach Flu): General viral symptoms such as fever, loss of appetite, vomiting, and headaches can be signs of stomach flu. Gastroenteritis can also present without abdominal pain. However, the absence of diarrhea, recent travel, new foods, and body aches can rule out this condition.

UTI: Fever and nausea/vomiting can be signs of a UTI. Being sexually active can also increase the risk of a UTI. Even though the patient had pain in the right lower quadrant, abdominal pain from a UTI can appear in that general region. Factors that make this condition less likely include the lack of dysuria, flank pain, and urinary frequency and urgency.

Small Bowel Obstruction: Frequent vomiting is a classic symptom of a small bowel obstruction, as the blockage prevents the normal passage of food and fluids, leading to regurgitation. Additionally, the patient has a history of abdominal surgery, having undergone two C-sections. Previous abdominal surgeries increase the risk of adhesions, which are a common cause of SBO. Lastly, she has a loss of appetite. The inability to keep food down and a loss of appetite are consistent with SBO. But, pts with SBO would experience massive amounts of pain, pain out of proportion to the exam and visibly look unwell.

Labs/tests:

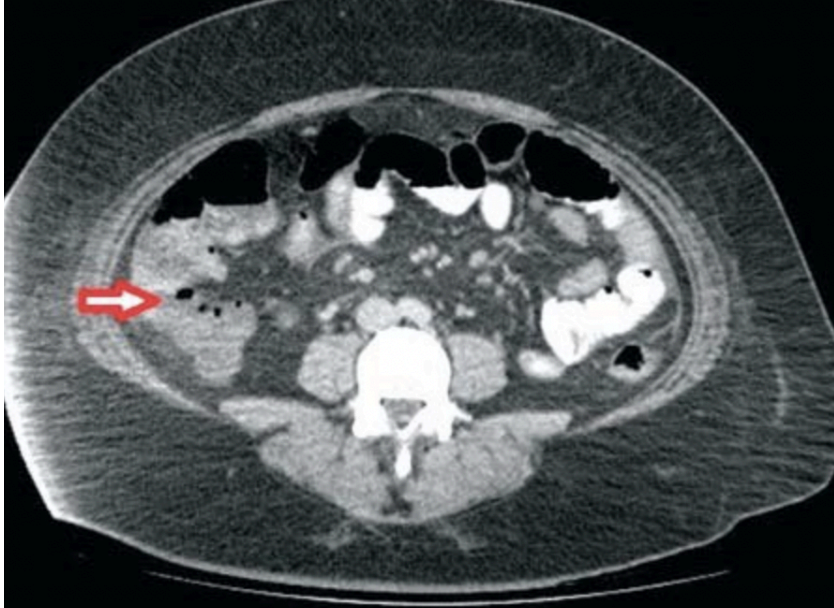
Imagining: CT of the abdomen and pelvis without contrast to R/O appendicitis

Urine pregnancy because pt is child bearing age: negative

Urinalysis:

Leu: neg
Nit: neg
Uro: 2
Pro: 30
PH: 5
Blood: 250
SG: 1.025
Ket: neg
BIL: 1
GLU: neg

COVID: negative



Sample image of CT with acute appendicitis

Treatment/Plan:
Suspected appendicitis: We would send patients to the ER if they are in a primary care or urgent care location.
At the ER:
Treatment: Appendectomy
NPO
Fluid resuscitation due to multiple episodes of vomiting
Supportive care with antiemetics (IV zofran)
Antibiotics –Ceftriaxone 1 gram and Metronidazole 500mg IV

Patient Counseling:
At urgent care, I would explain to the patient what appendicitis is and why they need to go to the ER right away for treatment in order to prevent future complications.

Appendicitis is a medical emergency that happens when the appendix becomes inflamed or infected due to a blockage. The appendix is a small, finger-shaped pouch of tissue attached to the large intestine in the lower right abdomen. Blockages can be caused by hard stool, swollen lymph nodes, parasites, or other infections. The main symptom is severe, sharp pain in the lower right abdomen. Appendicitis is dangerous because it can't be treated with medication most of the time. If it happens, it's an emergency that requires surgery. Immediate surgery is needed to prevent complications. If treatment is delayed, the appendix can burst and cause life-threatening problems such as sepsis.

Recovering and care after surgery:
Rest and refrain from strenuous activities for a few weeks.

Slowly reintroduce regular foods into your diet as you can tolerate them.
Monitor the surgical site for signs of infection, such as redness, swelling, or increased pain, and notify your doctor immediately if these occur.