OSCE-Type case assignment

Scenario:
A 22 year old G4P2022 female s/p NVD presents to the emergency department with nausea, vomiting, right sided lower back pain, right lower quadrant pain and suprapubic pain for the past 1 day.

History elements (these also indicate the questions that should be asked):

General questions to ask this patient:

- How long have you been experiencing nausea, vomiting, and pain?
- Can you describe the pain? Is it sharp, dull, constant, or intermittent?
- Where exactly is the pain located?
- Does the pain radiate to other areas?
- Do you have a fever or chills?
- Any changes in bowel movements or trouble urinating?
- Any vaginal discharge or bleeding?
- How long ago did you deliver and what type of delivery was it?
- When was your last menstrual period?
- Did you take anything over the counter?
- Were there any complications during or after the delivery?
- Do you smoke, drink alcohol, or use recreational drugs?
- Are you currently taking any medications or have any drug allergies?

GP hx:

- How many pregnancies have you had?
- How many term deliveries?
- How many preterm deliveries?
- How many abortions/miscarriages?
- How many living children?

Facts about the case:

- Patient stated that the pain began gradually in her lower back and radiated towards right lower abdomen.
- There was an increase in pain intensity to score 10/10 prompting her to come to the ER.
- Patient reports that the pain is worse with movement and improves slightly when lying still.
- Patient has been feeling increasingly fatigued and weak over the past day.
- Patient took two tylenol pills in the morning prior to arrival with no relief in pain.
- Patient noted 4 episodes of vomiting with associated nausea.
- Recently has a natural spontaneous vaginal delivery on 06/02 with no complications.
- Patient admits that they have been able to urinate normally without issue and the last bowel movement was 1 day ago.

- Patient admitted to having a subjective fever (feeling warm) yesterday but did not check with the thermometer.
- Not currently sexually active since recent birth.
- Denies any history of STIs and currently is married to 1 male partner.
- No significant past medical history.
- Denies any chest pain, shortness of breath, vaginal discharge, dysuria, hematuria.

Physical Exam (also indicates what procedures should be done) + Vitals

Vital signs:
-BP: 110/76
-Pulse: 80
-Respiratory rate: 18
-Temperature: 99.5 F (oral route)
-SpO2: 99%

Constitutional:
-General: She is in acute distress
-Appearance: well-developed.

HEENT:
-Head: Normocephalic and atraumatic.
-Mouth/Throat/Pharynx: No oropharyngeal exudate.
-Pupils: Pupils are equal, round, and reactive to light.

Neck:
-Thyroid: No thyromegaly.
-Vascular: No JVD.
-Trachea: No tracheal deviation.

Cardiovascular:
-Normal rate and regular rhythm.
-Normal heart sounds. No murmur heard.
-No friction rub. No gallop.

Pulmonary:
-Effort is normal.
-No respiratory distress.
-Normal breath sounds. No stridor. No wheezing, rhonchi or rales

Abdominal:
-Bowel sounds are normal. There is no distension.
-Abdomen is soft. There is no mass.
-There is lower abdominal tenderness and the uterine size is 14 cm. There is guarding. There is no rebound.

-No hernia is present.
-No distention or ecchymosis.

Musculoskeletal:
-No CVA tenderness or deformity.
-Normal range of motion.
-No edema in right lower or left lower legs
-No presence of DVT seen on physical exam
-Skin is warm and dry.
-Capillary refill takes less than 2 seconds.
-No bruising, erythema or rash.

Pelvic exam: Examination was not indicated

Neurological:
-Mental Status: She is alert and oriented to person, place, and time.

Differential Diagnosis:

1. **Acute postpartum endometritis:** Since this patient was recently postpartum status (10 days post NSVD), endometritis is the likely diagnosis as it is a clinical diagnosis. It's an infection of the uterine lining and typically presents with fever, abdominal pain, and sometimes abnormal foul smelling lochia (vaginal discharge). The presence of right lower quadrant and suprapubic pain, along with subjective fever, supports this diagnosis.

2. **Ovarian Torsion:** This diagnosis must be considered due to the severe, localized pain in the right lower abdomen and should not be missed. This diagnosis can cause sudden, unilateral severe abdominal pain and is associated with nausea and vomiting. Often a bedside doppler ultrasound is used to check for ovarian edema, abnormal ovarian blood flow and enlargement of the ovary.

3. **Appendicitis:** This can be considered as this patient is currently having RLQ pain and presents with subjective fever and should not be missed. There is also evidence of guardian nausea and vomiting that the patient was experiencing. Usually some physical exam findings like Mcburnerys point or rovsing sign can be performed and CT of abdomen/pelvis is ordered for non pregnant patients and would be an appropriate choice for this patient to check if there are signs of inflammation with the appendix.

4. **Acute Pyelonephritis:** Since this patient had a combination of a subjective fever, nausea, vomiting (4 episodes), right-sided lower back pain with radiation to right lower quadrant pain can suggest pyelonephritis. Acute pyelonephritis typically presents with flank pain, fever, chills, and urinary symptoms (dysuria, frequency and urgency) although this patient did not have any urinary complaints or CVA tenderness.

Tests (Student will be given results for any that are ordered):

1. **Bedside Ultrasound with doppler:** This imaging modality can evaluate the uterus and check for any ovarian abnormalities. Both a transvaginal and pelvic ultrasound should be preformed on this patient. This can rule out ovarian torsion and potentially appendicitis.
2. **Urinalysis and Urine Culture:** A urinalysis can detect signs of urinary tract infection by checking for nitrites and leukocytosis . Urine culture can identify the specific pathogen causing the issue and can guide antibiotic selection. If there is presence of pyuria, then it can lean more towards acute pyelonephritis.
3. **Complete Blood Count with differential (CBC):** A CBC helps assess for signs of infection or inflammation, such as an elevated white blood cell (WBC) count, which can be supportive in cases of endometritis or pyelonephritis.

Treatment plan:
-Admit patient to GYN floor for intravenous antibiotics.
-Start treatment with IV ampicillin, gentamicin and clindamycin.
-Reassess fluid resuscitation as needed since the patient has been vomiting.
-Monitor pain control and give pain medication (extra strength tylenol as needed)
-Monitor vital signs closely and reassess temperature as it was (99.5 F)

Patient education and counseling:
-Tell the patient that we suspect that they have developed an infection of the uterus, called endometritis.
-Explain that this can commonly occur after delivery and is treatable.
-Explain to the patient that in order to treat this, they need to be admitted to the GYN unit where they will receive antibiotics through an IV.
-Tell patients that these medications are aimed at clearing the infection and helping her recover.
-Invite patient to ask questions and used the teach back method to make sure that she has understood the important points