Examination

1. Which of the following statements is true.
   a. Ultrasound is rarely performed in the evaluation of a patient with pelvic pain.
   b. Ultrasound studies rarely help in directing the patient to surgical or medical consultation.
   c. Initially, the most important aspect of the evaluation is taking the patient's history.
   d. Most if not all, pelvic pain is caused by ovarian cysts.
   e. The purpose of the ultrasound exam is primarily to rule in or out, the presence of an ovarian cyst.

2. Regarding a ruptured ovarian cyst,
   a. they are asymptomatic until pressure is applied to the area called the "trigger" point.
   b. the pain will travel from one side to the other due to the flow of nerves found in the pelvis.
   c. a "ring of fire" flow on color imaging should be present surrounding cysts that have ruptured, because if not present, then a rupture has probably not occurred.
   d. if there is a great deal of bleeding, the pain may be seen in the upper abdomen, but this is rare.
   e. the side that contains the bleeding (if bleeding has occurred) is always found on the same side as the rupture, which aids in making the diagnosis.

3. For certain practice localities, pelvic inflammatory disease (PID) represents the most frequent cause of pelvic pain. This is a serious condition possibly leading to all of the following EXCEPT
   a. adhesions
   b. small bowel obstruction
   c. peritonitis
   d. pyosalpinx
   e. obstruction of the colon

4. For torsion of the ovary, which of the following statements is true?
   a. Usually the pain is so mild that diagnostic procedures are not performed.
   b. As a torsion progresses, lymphatic, venous and then arterial flow can cease.
   c. Despite the fact that the ovary can sometimes untwist by the time of an ultrasound study, a Doppler evaluation should still be performed.
   d. Ultrasound is not helpful in making this diagnosis, thus all patients should undergo CT.
   e. the pedicle to the ovary should be seen as twisted in order to make this diagnosis.

5. Patients with an ectopic pregnancy usually have a positive HCG. When the HCG levels are obtained 48 hours apart, about
   a. 85% of both normal intrauterine pregnancies and ectopic pregnancies will have a 66% or more increase in the HCG level.
   b. 15% of both normal intrauterine pregnancies and ectopic pregnancies will have a 66% or more increase in the HCG level.
   c. 85% of normal intrauterine pregnancies will have a 66% or more increase in the HCG level and about 15% of ectopic pregnancies will not.
   d. 15% of normal intrauterine pregnancies will have a 66% or more increase in the HCG level and about 85% of ectopic pregnancies will not.
   e. 85% of normal intrauterine pregnancies will have a 66% or more increase in the HCG level and about 85% of ectopic pregnancies will not.
6. The main purpose of the ultrasound exam in a woman with pelvic pain and a positive HCG is to
   a. determine whether the pregnancy is in the uterus.
   b. identify the location of the ectopic pregnancy.
   c. identify which side the corpus luteum is located.
   d. identify the amount of blood in the pelvis (if bleeding has occurred)
   e. identify the number of ovarian cysts that are present and whether any have ruptured.

7. Regarding pelvic pain caused by necrosis of a fibroid,
   a. the pain is usually described as “deep”, and there may be associated “cramping”.
   b. the ultrasound image may show a uterine myoma having increased echodensity compared to what is expected for
      the normal appearance of a myoma.
   c. a decrease in size of the fibroid compared to previous studies is an important clue to this entity.
   d. the diagnosis is made by identifying the “ring of fire” on ultrasound.
   e. the problem is caused by poor blood flow due to pelvic congestion system.

8. For appendicitis, look to see what position the __________ is in, as often the irritation of the psoas
   muscle region will prompt the patient to bend this extremity
   a. left leg
   b. right leg
   c. left arm
   d. right arm
   e. extremities are unimportant

9. Regarding appendicitis,
   a. a transvaginal study is usually of no benefit because the pelvic structures block the view of the appendix.
   b. in making the diagnosis by ultrasound, usually a thick tubular structure with peristalsis is identified.
   c. some patients will experience a vague feeling in the periumbilical region with indigestion followed by a more
      intense pain in the right lower quadrant.
   d. because the appendix is located on the lower right side of the abdomen, the pain is always located on the right
      side.
   e. because patients are apprehensive, most of the time they cannot direct the healthcare provider to the exact
      location of the pain.

10. A renal stone causing ureteral obstruction may present with an acute onset of intense pain,
    sometimes radiating into the lower pelvic area. The most common symptom of a renal stone is
    ________ pain.
    a. right leg
    b. chest
    c. abdominal
    d. flank
    e. pelvic

11. Which entity is seen most often following a recent delivery?
    a. Endometriosis
    b. Nerve compression
    c. Ovarian vein thrombosis
    d. Epiploic fat infarction
    e. Necrosis of a fibroid

12. Regarding hernias, which of the following statements is true?
    a. Even though an ultrasound image might see what looks like bowel herniation, if muscle laxity is not identified the
       diagnosis is ruled out.
    b. At times, the pain may extend up in the direction of the liver.
    c. Herniation of the bowel is easily seen by ultrasound and therefore, the patient’s position is of no extra benefit.
d. Patients with hernias, depending on the location, may experience pain localized to the abdominal wall
e. During an ultrasound evaluation, the Valsalva Maneuver should be avoided because it can distort the anatomy.

13. **Regarding diverticulitis, all of the following statements are true EXCEPT**
   a. it most often affects the descending and sigmoid colon regions.
   b. it can frequently be discovered by a careful ultrasound examination.
   c. these patients will usually have nagging deep pain, sometimes worse with walking, which tends to “grab” them at times with more intensity.
   d. normal pericolic fat will show flow on color imaging.
   e. color imaging may enhance the confidence in diagnosing diverticulitis due to an increased flow to the inflammatory region.

14. **Other causes for localized pain that is not sudden in onset include all of the following EXCEPT**
   a. neuromas
   b. necrosis within a lipoma
   c. a localized muscle tear
   d. nerve compression
   e. ovarian vein thrombosis

15. **For pain that is not localized and not sudden in onset, the most frequent finding for pre-menopausal patients relates to bilateral ovarian cysts that are too numerous to count and often**
   a. less than 0.5 cm in size
   b. less than 1.5 cm in size
   c. greater than 1.5 cm in size
   d. greater than 2.5 cm in size
   e. greater than 3.5 cm in size

16. **Regarding endometriosis, all of the following statements are true EXCEPT**
   a. Pain is recurrent around the time of the menstrual cycle and can be quite debilitating and severe.
   b. Recent reports suggest that the pain associated with endometriosis is most often related to the size of the endometrioma.
   c. Some patients may have pain only during sexual intercourse.
   d. This condition produces a wide scope of pain profiles, with many patients having pain at the beginning or at the end or even throughout their cycle.
   e. Not finding an endometrioma on ultrasound does not exclude this diagnosis, and often times, the diagnosis can only be determined by laparoscopy.

17. **Regarding the most common complaints of patients with ovarian cancer, in one series of 72 stage I ovarian cancer patients discussed in this article,**
   a. 35% had pelvic pain
   b. 75% had pelvic pain
   c. 58% had no pelvic symptoms at all
   d. 82% reported feeling bloated
   e. only 2% reported feeling bloated

18. **The Valsalva maneuver or tilting the examination bed to a head up position or having the patient stand may aid in the diagnosis of which of the following?**
   a. ovarian vein thrombosis and ovarian cancer
   b. epiploic fat infarction and occult AV malformation
   c. pelvic congestion syndrome and hernias
   d. torsion of the ovary and diverticulitis
   e. obstructed occult pelvic kidney and congenital bowel wall duplication cysts

19. **Not all pelvic cysts discovered in patients who are in pain are gynecologic in origin. One should also**
consider all of the following EXCEPT
a. peritoneal cysts
b. congenital bowel wall duplication cysts
c. vaginal wall cysts
d. obstructed occult pelvic kidneys
e. posterior meningeoceles

20. Pelvic ultrasound studies should thoroughly document the uterus and ovaries, but it is important to remember that pain can be evolutionary over time. Therefore, a repeat study in _________ if pain persists may aid in the diagnosis.

a. 1 to 2 days
b. 5 to 7 days
c. 7 to 14 days
d. 1 to 2 weeks
e. 30 days