UNIT FIVE: NEOPLASIA
EDUCATIONAL TOPIC 53: UTERINE LEIOMYOMAS

Rationale: Uterine leiomyomas represent the most common gynecologic neoplasm and often lead to medical and surgical intervention.

Intended Learning Outcomes:
The student will demonstrate the ability to:
• Discuss the prevalence of uterine leiomyomas
• Describe the symptoms and physical findings in patients with uterine leiomyomas
• Describe the diagnostic methods to confirm uterine leiomyomas
• List management options for the treatment of uterine leiomyomas

TEACHING CASE

CASE: A 42-year-old G3P3 woman presents with a history of abnormal bleeding and pelvic pain. She was well until approximately age 35, when she began developing dysmenorrhea and progressive menorrhagia. The dysmenorrhea was not fully relieved by NSAIDs. Over the next several years, the dysmenorrhea and menorrhagia became more severe. She then developed intermenstrual bleeding and spotting, as well as pelvic pain, which she describes as a constant feeling of pressure. She also complains of urinary frequency. Past gynecological history is otherwise non-contributory. She delivered three children by Caesarean section, the last with a tubal ligation at age 30. Her past medical history is unremarkable.

Physical examination reveals a well-developed, well-nourished woman in no distress. Vital signs and general physical exam are unremarkable. Abdominal examination reveals an irregular-sized mass extending halfway between the pubic symphysis and umbilicus and to the right of the midline. Pelvic exam reveals a normal appearing vagina and cervix. The uterus is markedly enlarged and irregular, especially on the right side where it appears to reach the lateral pelvic sidewalls. The adnexae are not palpable given the size of the mass.

Beta HCG is negative. CBC reveals hemoglobin of 10.3 and hematocrit of 31.2%. Indices are hypochromic, microcytic. Serum ferritin confirms mild iron deficiency anemia. Pap smear is reported negative for malignancy, adequate for evaluation. Ultrasound shows a large irregular mass, filling the pelvis and extending into the lower abdomen. The mass does extend into the right side of the pelvis. There is mild hydronephrosis on that side. The ovaries are not visualized. Endometrial biopsy reveals proliferative endometrium.

COMPETENCY-BASED DISCUSSION & KEY TEACHING POINTS:
Competencies addressed:
1. What are the likely causes of the mass?

- The most common cause of a large irregular uterine mass is leiomyoma. The clinical picture is typical of a patient with fibroids. The physician must be sure that the patient does not have ovarian neoplasia. Usually this is accomplished when the ultrasound confirms the diagnosis of fibroids.

- The differential diagnosis for a pelvic mass includes physiologic cysts, infection (tubo-ovarian abscess), benign and malignant neoplasms, endometriosis, and masses related to other abdominal/pelvic organ systems.

2. Describe the pathological changes of leiomyomata.

- Well circumscribed, non-encapsulated myometrium confirms the diagnosis of fibroids. It is a benign neoplasm.

- A leiomyosarcoma will have at least 10 abnormal mitoses per high power field, and is diagnosed histologically typically after surgical removal by way of hysterectomy/myomectomy.

- Fibroids are common; leiomyosarcoma is very rare.

- Pathological diagnosis is made for a patient who undergoes surgery. Biopsy for fibroids is not indicated.

3. Discuss the appropriate management of women with fibroids.

- Expectant therapy is acceptable if intervention is not warranted by the symptoms. No intervention is needed for women with asymptomatic fibroids. Many women with fibroids are asymptomatic.

- Provider should discuss patient’s desire for fertility when planning treatment.

- The most frequent presenting symptoms of uterine fibroids are bleeding, pressure symptoms, pain, and urinary complaints.

- Fibroids can be subserosal, intramural or submucosal. Submucosal fibroids are frequently associated with bleeding.

- Pregnancies in women with fibroids are usually uneventful. Fibroids can grow during pregnancy, which may impact fetal growth and mode of delivery.

- Fibroids are rarely a cause of infertility. There are specific criteria for the use of myomectomy in infertile patients.

- Progestin therapy is used for bleeding. OCs may be utilized.
4. What are the indications for hysterectomy in women with fibroids?

REFERENCES


American Family Physician:
www.aafp.org