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Editorial

Uterine Fibroids-Management Overview

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Uterine fibroids otherwise known as Leiomyomas are the most common benign tumors seen in women [1].They are benign monoclonal tumors from myometrial smooth muscles arising in reproductive age women and highly dependent on both estrogen and progesterone for their growth [2].

The tumors can either be broad or pedunculated and are localized subserosal, intramural or submucosal. There have also been cases of cervical and intraligamentary fibroids.

Fibroids have not yet being described in Pre-pubertal girls although clinically apparent in 12-25% of reproductive age women and seen in about 80% of uterine specimens [3]. Risk factors associated with the presence of uterine fibroids include race, parity, menstrual history, heredity, diet, cigarette smoking and alcohol use. They are about 2-3x more common in black women and 1.3 x more in hispanics than Caucasians [4,5].

Clinically, a large proportion of patients are asymptomatic but in symptomatic cases, there can be abnormal uterine bleeding, pelvic pressure, pelvic pain, reproductive dysfunction and hematological changes.

The diagnosis is usually clinical through the aid of an abdomino-pelvic examination and confirmed with imaging such as ultrasound, saline infusion sonography, Hysterosalpingogram, MRI or a diagnostic hysteroscopy [6,7].

Differential diagnosis include benign etiologies such as

- Pregnancy
- Adenomyosis
- Leiomyoma variant
- Hematometra
- Adenomatoid tumors

Or malignant tumors like

- Sarcoma; Leiomyosarcoma, endometrial stromal and undifferentiated endometrial sarcoma.
- Carcinosarcoma
- Endometrial carcinoma
- Metastatic disease

The management of uterine fibroids is mostly expectant but can be medical, surgical or radiological while the patient's age, type and severity of symptoms, myoma size, location of the myoma and her reproductive plans and obstetric history do factor into the management option chosen.

Medical management include the use of

- Hormonal therapies such as;
    - Combined oral contraceptives
    - Levonogestrel intrauterine system
    - Progestin Implants, injections and pills
    - Gonadotropin releasing hormone agonists
    - Gonadotropin releasing hormone antagonists
    - Antiprogestins and Progesterone receptor modulators.
- Others
    - Raloxifene
    - Aromatase Inhibitors
    - Antifibrinolytics
    - NSAIDs
    - Androgenic steroids

Surgical options include

- Hysterectomy

- Open
- Laparoscopic

- Myomectomy
  - Open
  - Vaginal
  - Hysteroscopic
  - Laparoscopic
- Endometrial ablation
- Uterine artery occlusion
  - Laparoscopic
  - Vaginally placed clamps
- Myolysis
  - Hysteroscopic with myosure or truclear
  - Laparoscopic with thermal coagulation, radiofrequency or cryoablation.

The most common indication for hysterectomy are uterine fibroids [8] mostly due to bulk symptoms and non responsive hemorrhage particularly in those with completed childbearing while a myomectomy is performed in those who wish to retain their uterus probably due to incomplete childbearing.

Endometrial ablation is usually performed for the management of bleeding abnormalities in those with completed childbearing but is unlikely to improve bulk symptoms.

Radiological management options are mainly:

- Uterine artery embolization; a minimally invasive option which preserves the uterus but not fertility and has been associated with a 30-46% reduction in uterine fibroid size [9] and
- Magnetic Resonance guided focused ultrasound (MRgFUS); a non-invasive thermoablative technique which has been associated with a reduction in uterine fibroid size. Future pregnancies are not contraindicated with its use but the maximum treatable fibroid size is still unknown. Contraindications include severe adenomyosis, presence of 5 or more fibroids and non-enhancement with gadolinium [10,11].

References

1. Baird DD, Dunson JB, Hill MC, Cousins D, Schectman JM. High cumulative incidence of uterine leiomyoma in black and white women: ultrasound evidence. Am J Obstet Gynecol. 2003;188(1):100-107.

2. Buttram VC Jr, Reiter RC. Uterine leiomyomata: etiology, symptomatolgy, and management. Fertil Steril. 1981;36(4):433-445.

3. Cramer SF, Patel A. The frequency of uterine leiomyomas. Am J Clin Pathol. 1990;94(4):435-438.

4. Stewart EA, Cookson CL, Gandolfo RA, Schultz-Rath R. Epidemiology of uterine fibroids: a systematic review. BJOG. 2017;124(10):1501-1512.

5. Marshall LM, Spiegelman D, Barbieri RL, et al. Variation in the incidence of uterine leiomyoma among premenopausal women by age and race. Obstet Gynecol. 1997;90(6): 967-973.

6. Committee on Practice Bulletins-Gynecology. Practice bulletin no. 128: diagnosis of abnormal uterine bleeding in reproductive-aged women. Obstet Gynecol. 2012;120(1): 197-206.

7. Bradley LD, Falcone T, Magen AB. Radiographic imaging techniques for the diagnosis of abnormal uterine bleeding. Obstet Gynecol Clin North Am. 2000;27(2):245-276.

8. Stewart EA. Uterine fibroids. Lancet. 2001;357(9252):293-298.

9. Gupta JA, Sinha AS, Lumsden MA, Hickey M. Uterine artery embolization for symptomatic uterine fibroids. Cochrane Database Syst Rev.2012.

10. Stewart EA, Gostout B, Rabinovici J, et al. Sustained relief of leiomyoma symptoms by using focused ultrasound surgery. Obstet Gynecol. 2007;110:279-287.

11. Rabinovici J, David M, Fukunishi H, et al. Pregnancy outcome after magnetic resonance-guided focused ultrasound surgery (MRgFUS) for conservative treatment of uterine fibroids. Fertil Steril. 2010;93(1):199-209.