



Uterine Fibroids

What are Uterine Fibroids (UF)?

Uterine fibroids (leiomyomas) are the most common benign (noncancerous) pelvic tumors in women. They are described according to their location and size of the fibroids. It is estimated that up to 80% of women have at least one uterine fibroid by the time they are 50 years of age.ⁱ Tumors can be as small as an apple seed or as big as a grapefruit and can grow or shrink over time.ⁱⁱ

Factors that increase a women's chance of developing fibroids includeⁱⁱⁱ:

- Increasing age (40-50 years)
- Family history
- Race (African American)
- Early start of menstrual cycle
- Hypertension
- Obesity
- Alcohol use

Symptoms

Women with UF may experience the following symptoms^{iv}:

- Heavy and/or long menstrual periods
- Pain, pressure or bloated belly
- Bowel or urinary issues
- Difficulty getting pregnant

Although many women may have no symptoms, those that experience them may have a reduced quality of life.

Diagnosis

Diagnosis of UF is based on pelvic examination and transvaginal ultrasound. In those with suspected submucosal fibroids or those desiring to become pregnant, a saline infusion sonogram may be indicated. Routine use of magnetic resonance imaging (MRI) is not recommended but may be necessary if malignant disease (cancer) is suspected.^v

Treatment Options

Both medical and surgical treatment options are available for symptomatic relief of UF by reducing heavy menstrual bleeding and discomfort (see table below).

Currently, symptomatic treatment largely involves nonsteroidal anti-inflammatory drug (NSAID) analgesics and hormonal therapies, including oral contraceptives, as well as more invasive surgical options. However, women in search of reducing heavy menstrual bleeding often seek multiple medical and surgical treatments. Approximately 79% of women expressed the

importance of having a treatment option that did not involve surgery. In one analysis, despite a desire for noninvasive treatment options, half of women treated for UF underwent surgery.ⁱ

Treatment Options Based on Patient and Provider Treatment Goals ^v		
Goal	Medical	Procedural/Surgical
Preserve Fertility	<ul style="list-style-type: none"> • NSAIDs (i.e., ibuprofen, naproxen) • Oral Contraceptives • Intrauterine Devices (IUDs) – Progestin only • Tranexamic Acid • Oral GnRH Antagonists^{vi} 	<ul style="list-style-type: none"> • Myomectomy (± GnRH agonist)
Preserve Uterus		<ul style="list-style-type: none"> • Uterine Artery Embolization • Magnetic resonance-guided focused ultrasound • Myomectomy (± GnRH agonist)
Non-Preservation	No options available	Hysterectomy ± bilateral salpingo-oophorectomy

Adapted from De La Cruz 2017
GnRH=gonadotropin-releasing hormone

Employer Impact

Many women with symptomatic fibroids live with concerns affecting activities of daily living, relationships, mood, health and employment.

While there is a significant economic burden of UF, there is also an annual cost of absenteeism and short-term disability of \$1.6 to \$17.2 billion.^{vii}

A study of 873 employed women with self-reported UF found an average of 7.7 to 12.1 hours of work lost per week due to moderate and severe UF symptoms, respectively.^{viii} The total loss in productivity (absenteeism and presenteeism) from UF is approximately \$30 billion per year.^{ix}

Although selection of a treatment should be specific to the patient and provider goals, the risk of requiring reintervention should be an important consideration when determining the appropriate treatment approach given the cost and patient burden associated with additional interventions.^x

ⁱ Borah BJ, et al. Am J Obstet Gynecol. 2013.209(4);319.e1-319.e20.

ⁱⁱ Office of Women’s Health.2019. <https://www.womenshealth.gov/a-z-topics/uterine-fibroids>. Accessed April 30, 2020.

ⁱⁱⁱ Fuldeore MJ and Soliman AM. Int J Women’s Health. 2019(9):403-411.

^{iv} Stewart EA, et al. Nat Rev Dis Primers. 2016;2:16043.

^v De La Cruz MSD, et al. Am Fam Physician. 2017;95(2):100-107.

^{vi} Chwalisz K, et al. Current and Emerging Medical Treatments for Uterine Fibroids. Seminars in Reproductive Medicine. 2017;35(6):510-522.

^{vii} Cardozo ER, et al. Am J Obstet Gynecol. 2012;206(3):211 e211-219.

^{viii} Soliman AM, et al. J Occup Environ Med. 2017;59(10):974-81.

^{ix} Soliman AM, et al. PIH33. ISPOR 21st Annual International Meeting. May 21-25, 2016, Washington, DC.

^x Davis MR, et al. J Womens Health (Larchmt). 2018 Aug 7. Doi:10.1089/jwh.2017.6752. [Epub ahead of print].