The 5 Most Important Things to Know About Uterine Fibroids





THE LEADING SPECIALISTS

A noted uterine fibroid specialist in Portland explains five important things you need to know about fibroids.

DR. MARY COSTANTINO

has focused on and specialized in Uterine Fibroid Emobolization since 2000.

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INTRODUCTION

Mary Costantino, MD

My name is Dr. Mary Costantino, MD. I am a specialist in Vascular and Interventional Radiology, and Medical Director at Advanced Vascular Centers - Portland. As a doctor and a woman, one of my passions in life is educating patients about uterine fibroids, a condition that affects literally millions of women. In my practice and in this EBook, one of my missions is to educate women about the available uterine fibroid treatment options, including minimally invasive uterine artery embolization (UAE), also known as uterine fibroid embolization (UFE).

I developed a focus on uterine fibroids early in my career. In 2000, while in medical school at UCLA, I did research on the first set of patients in the U.S. to be treated with Uterine Fibroid Embolization (UFE). I was lucky enough to work with the physician who performed the first UAE in the United States. UFE was initially performed in France, and was described in the literature in 1995. I found that UFE had many benefits over other forms of fibroid treatment, and I decided to specialize in the treatment of uterine fibroids.

After an internship at Stanford University and my residency at Oregon Health & Science University, I was fortunate enough to secure a fellowship at Georgetown University with Dr. James Spies. Dr. Spies is one of the most revered leaders in fibroid embolization in the world, and his mentorship helped to shape the direction of my medical career. In 2019 Dr. Spies was awarded the Gold Medal from the Society of Interventional Radiology, an honor bestowed to few. His award was based on his excellence in fibroid embolization, including his contributions towards the advancement of the technique and his exceptional care of patients. I learned early on from the best and continue to practice medicine using the following mantras: 1. Always be current on the literature and equipment 2. Patent selection is very important (don't treat people who shouldn't be treated) 3. Be very involved in the pre- and post-procedure course and 4. Treat every patient as I would if she were my sister or mother.

I believe that a well-informed patient is best able to participate in her treatment. Women are smart and have good instincts. My consults are usually an hour, and patients are well-informed and included in the de- cision-making process. By listening to patients, I make sure each woman has the information she needs to choose the treatment that is best suited to her, her individual condition, and her personal treatment goals. Uterine fibroids are not a rare condition, 3 in 4 American women will develop fibroids by the age of 50. In many cases, these fibroids do not cause symptoms, so many women are unaware that they have fibroids and are surprised by the diagnosis. In this case, there is no need to treat, fibroid size can be monitored with an annual ultrasound, and most importantly, women can be educated about potential symptoms. If you have been diagnosed with uterine fibroids, or if you are experiencing some of the symptoms we'll cover in this EBook, here are the five most important things you need to know about fibroids.

FIBROIDS - WHAT THEY ARE, WHAT THEY AREN'T, AND WHO GETS THEM

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uterus during a woman's childbearing years. Also called leiomyomas or just myomas, fibroids can grow as single tumors, or in groups of them. They range in size from the size of a pencil eraser to bulky masses that can distort and enlarge the uterus. In unusual cases they can become very large, the size of a grapefruit, or even a small watermelon. Fibroid tumors are NOT cancerous. Uterine fibroids are not associated with an increased risk of uterine cancer and do not turn into cancer. There is a malignant form of a fibroid, called a leiomyosarcoma, which is fortunately rare. Leiomyosarcomas are fast growing and have MRI characteristics that are different from benign fibroids. In terms of "who gets fibroids," the answer is "most women." It has been estimated that as many as 50–70% of Caucasian women and 80% of African-American women develop fibroids by the age of 50. That said, there are factors that can increase your risk of developing fibroids:



- Age. Fibroids become more common as you age, especially during your 30s and 40s. After menopause, fibroids can slowly shrink.
- Family history. If you have a family member who has fibroids, your risk is higher. For example, if your mother had fibroids, your risk of developing them yourself is about three times higher than average.
- Ethnicity. African-American women are more likely to develop fibroids than Caucasian women, and are more likely to develop fibroids at younger ages.
- Identical twins are more likely to develop fibroids than non- identical twins.
- Obesity. If you are overweight, you have a higher fibroid risk. For obese or very heavy women, the risk is two to three times greater than average.
- Environmental factors. Onset of menstruation at an early age, use of birth control, having a vitamin D deficiency, having a diet high in red meat and low in vegetables, and drinking alcohol all ap- pear to increase your risk of developing fibroids.

FIBROID SYMPTOMS

Symptoms fall into two categories: those related to bleeding, and those related to bulk. The symptoms of uterine fibroids usually start with mild increased cramping with menses and/or a slight increase in bleeding during periods. As the fibroids grow, the symptoms will progress and can be severe enough to land the patient in the hospital.

The most debilitating symptom is heavy periods. A patient with moderate symptoms may change a pad or tampon once every 3-4 hours, a patient with heavy symptoms will change a pad or tampon every 1-2 hours. Often there are clots, and flooding (a gush of blood). Anytime a woman bleeds through clothes, gets up at night to change her pad/tampon, alters her schedule to be near a bathroom or avoid activities such as plane flights, drives or vacations because of her menses, the fibroids should be treated. Fibroids should NOT cause bleeding in between cycles.

- Symptoms of anemia increased fatigue, dizziness
- Anemia low ferritin, iron or Hemoglobin on a blood draw
- Need for iron or blood replacement
- Cycles becoming heavier and heavier over 6 months to a year

'Bulk symptoms' relate to the actual mass of the fibroid pushing on surrounding pelvic structures. The particular size and location of the fibroid will determine which bulk symptoms each woman experiences. The most common is a general heaviness in the pelvis, which can be positional. A woman may change the side that she sleeps on, be unable to sleep on her back or stomach, or may be unable to do activities such as yoga or cycling.

The need to urinate frequently is another common bulk related symptom. This is because the uterus sits right on top of the bladder, and the fibroids push the uterus forward, which traps the bladder between the fibroid and the pubic bone. The bladder is a stretchy organ, but it can't compete against the solid heavy fibroids. As the fibroids grow the bladder is pushed against the pubic bone, and cannot expand. Hence, the urge to urinate frequently, despite small volumes.

Cycles become gradually heavier, which results in slowly progressing symptoms. Often a woman is not aware of how bad her situation is until she sits in front of a fibroid specialist and starts to talk about her cycle. Women are used to pushing through and putting up with symptoms, even when they are quite severe.

If you experience any of the following, a consultation for fibroid treatment is recommended:

- Prolonged menstrual periods that can last 7 or more days
- Bleeding through clothes
- Needing to wear tampons and superpads
- Wearing multiple layers of protection at night
- Knowing where all of the bathrooms are during your usual daily activities
- Changing plans or scheduling vacations around your cycle

If you experience any of the following, a consultation for fibroid treat- ment is recommended:

- Frequent urination
- Difficulty emptying the bladder
- Feeling of fullness in the lower stomach area
- Enlargement of the lower abdomen
- Pain during sex
- Pelvic pressure and lower back pain, leg pains
- Large or numerous fibroids with infertility
- Constipation

FIBROID SYMPTOMS

If your fibroids produce symptoms, they can affect your everyday activities and greatly reduce your overall quality of life. Many women say that their fibroids are so painful that it "puts them out of action" for several days a month, and they actually miss work because of them. Others fear that the fibroids will interfere with their desire to have chil- dren. And most women with symptomatic fibroids have to deal with heavy periods, cramps, and constant feelings of exhaustion.

Over time, these symptoms can make you feel irritable or even depressed. Symptomatic fibroids can even have a negative effect on your relationships. The emotional burden of heavy bleeding and pelvic symptoms can be disruptive to a relationship, and the frank amount of blood can be overwhelming. If I had a dime for every time I heard a husband who describes so much blood that it looks 'like a murder scene'... Intercourse can be consistently painful, reducing the desire for intimacy. Constant and unrelenting fibroid symptoms can erode self- esteem and make a woman feel genuinely bad about herself.

'I'll do something about this next month, but I'm fine for now.' None of this is normal. There is no need to "tough it out" or pretend that such symptoms are "normal." They aren't normal, and there are effective treatments that can reduce or eliminate fibroid symptoms, and the fibroids themselves. In the next section we present information about some of these treatments.



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As strange as it may sound, many women manage to ignore this long list of disturbing symptoms. They tell themselves that the pain and discomfort are "just part of normal life for a woman." Some women believe this so thoroughly that they don't consult a doctor or uterine fibroid specialist, and try to "tough it out."

Women are also very busy taking care of other people, between work, kids, managing households, we often put ourselves last. Because there is relief from the symptoms after each cycle, the severity can be forgotten. Women will think 'it's not that bad' or

HOW FIBROIDS ARE TREATED -THE OPTIONS AVAILABLE TO YOU

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If you take nothing else away with you after reading this EBook, let it be this: When it comes to uterine fibroid treatment, you have options. When seeking treatment, the vast majority (I'd estimate >90%) of women throughout the country are told without discussion that they need a hysterectomy, and surgical scheduling for hysterectomy happens then and there. It can be extremely difficult for a woman to hear that she is about to have a hysterectomy. Over the 15 years that I have been treating fibroids I have learned that this hesitation often has nothing to do with whether the woman wants to have more children. Women can be apologetic for wanting to keep their uterus, and I think we need to send a clear message that NO APOLOGY IS NECESSARY. As doctors, we owe it to YOU, to give you two things:



 All of your treatment options, both surgical and non-surgical.

Our professional opinion about
each of these
options for YOU.

FIBROID TREATMENT OPTIONS



When I consult with a woman, the consultation is rarely about 'can I do an embolization' as that is often a technically easy decision. The consultation is more about listening to the patient to decipher what she wants as her desired outcome. Women have incredibly strong instincts. Those instincts combined with my 10 years of training, with an additional >10 years of experience, and my baseline knowledge of fibroids and treatment options will guide the two of us to the best treatment for each woman. What constitutes the "best" or "most effective" treatment option for you depends on the severity of your symptoms, as well as your personal situation and goals, and your age. What works "best" to eliminate the symptoms of uterine fibroids or the fibroids themselves is very much an individual consideration. At Advanced Vascular Centers - Portland, I am very dedicated to ensuring that every patient is fully informed. We are excellent at the technical aspect of the procedure, and believe we provide the best patient experience. Along with that, we want our patients to feel cared for and guided throughout the process. At each consultation we will present a comprehensive review of all ALL of the possible treatment options available to our patients.

One of the reasons for this EBook is that not all of these options are presented to women by their general practitioners or gynecologists. At AVC, we want to make sure that all fibroid patients are very clear about the different treatment options, so they can make the best decision about how to proceed. I work with the patients' doctors – whether primary care physicians, gynecologist, or naturopaths, to ensure a

I believe 100% that educating a woman is empowering her to make the best decision for her.

For a woman who is still wanting to retain the option of child-bearing, hearing that she needs a hysterectomy instantly robs her of that desire. This is a very painful moment. Women with fibroids will have a decreased ability to conceive and carry a fetus to term, and realistic conversations about patient desires, realistic outcomes and options should be discussed. However, the answer is not that there are no options. The emotional distress that a woman who desires pregnancy feels when told that her only option is hysterectomy runs deep. Even if fertility is diminished, even if there is a lesser chance of carrying to term, acceptance and adjustment to this can be a journey. While we need to be realistic about the ability to carry a child, the long-term emotional consequence of a hysterectomy 'against her will' can be significant.

very personal level of care.

We feel that the best care is provided by putting the patient first and working with the entire care team to achieve the best possible treatment outcome. Each fibroid patient is an individual, and thus deserves individual care to help guide them to the proper treatment choice.

If the fibroids are asymptomatic no treatment is necessary. In this case, watchful waiting is advised.

If the fibroids are causing symptoms – especially painful ones – there are treatments that can help. Which treatment is right for you depends on a number of factors, including:

- The severity of the symptoms
- The size and location of the fibroids
- Proximity to menopause
- Desire to become pregnant
- Medical risk factors
- Social variables, such as amount of time a woman can afford to take off from a job, or care for loved ones, for recovery.

FIBROID TREATMENT OPTIONS

- Medication If you have mild symptoms, your doctor may suggest taking medications. For cramping, this treatment might include over-the-counter drugs such as ibuprofen or acetaminophen. If you have mild to moderate bleeding during your period, low-dose birth control pills or a Merina IUD can help normalize this bleeding. Iron supplementation is also often recommended to prevent symptoms of anemia. In the case of very heavy periods, hormone control with an IUD or OCP's may work, sometimes for up to several years. Other drugs, such as Lupron®, can shrink your fibroids, and is used to urgently stop a massive hemorrhage, but this is usually not a reasonable sustainable treatment.
- Myomectomy This is a surgical procedure to remove the fibroids without taking out the healthy tissue of the uterus. It is widely considered a good option for women who want to have children after treatment. Myomectomy is always an option that should be discussed. Certain situations such as multiple or numerous fibroids or large fibroids may pose a higher surgical risk. Myomectomy and UAE are the only uterine-sparing definitive treatment options for symptomatic fibroids. • Hysterectomy - Hysterectomy is the traditional surgical treatment for fibroids, with >500,000 hysterectomies performed each year. While hysterectomy is a desired treatment for some, many would opt for a less invasive treatment with a shorter recovery time. Also, many women simply do not want to lose their uterus unless all other options have been excluded. One benefit of hysterectomy is that there will no longer be bleeding of any kind - whether due to the fibroids or hormones.
- Endometrial Ablation In this procedure, the lining of the uterus is destroyed to control very heavy bleeding. This can be done with a laser, wire loops, electrical current, microwaves, freezing, and other methods. Pregnancy after endometrial ablation must be avoided due to a high rate of ectopic pregnancy and miscarriage. After ablation there is no healthy lining of the uterus. Ablation is a good minimally invasive outpatientprocedure, usually performed for heavy bleeding due to hormones or sometimes adenomyosis. It is less commonly offered for treatment of uterine fibroids, since it does not actually treat the fibroid.
- **Myolysis** In this procedure, a needle is inserted into the fibroids, usually guided by laparoscopy, and an electrical current or freezing is used to destroy the fibroids. Laparoto- my involves an abdominal incision to remove the fibroids, no matter the size or location of the tumors.
- Uterine Fibroid Embolization (UFE), or Uterine Artery Embolization (UAE) - With this procedure, a thin tube is inserted into the arteries that supply blood to the fibroid. Then, tiny plastic or gel particles

are injected into the blood vessels. This effectively blocks the blood supply to the fibroids, causing them to shrink. UFE is minimally-invasive, and requires no incisions or general anesthesia. Given the minimally invasive nature of the procedure, complications are rare. Recovery time is one week, compared to 4-6 weeks with a hysterectomy. UAE spares the uterus, and though the societal recommendations are for myomectomy in women who are actively trying to become pregnant, the data demonstrates many successful pregnancies post-UAE. Depending on the size, number and location of the fibroids, myomectomy or UAE will be the best option. This can be discussed in detail at the time of a consultation.

There are cases in which all of these treatment options are appropriate. But there are definite benefits to UFE, which will be discussed in the next section.

In 2009, the American College of Gynecology determined that uterine artery embolization, myomectomy and hysterectomy are all Level 1 treatment options. That means that are all effective to the same degree, and all three of these options should be discussed.

YOU DON'T HAVE TO LOSE YOUR UTERUS TO TREAT UTERINE FIBROIDS

UFE has many advantages over other, more drastic fibroid treatment options. One of the most important of these advantages, of course, is that you don't have to lose your uterus, as you do with hysterectomy. More than 500,000 hysterectomies are performed in the U.S. every year, with uterine fibroids the most common reason. And while hysterectomy may relieve the pain of fibroids, in a patient with fibroids, a hysterectomy will be more complex than in a patient without fibroids. In addition to the more systemic effects of losing the uterus, pregnancy becomes impossible. The procedure itself risks blood loss and the need for blood transfusions. Hysterectomy can also cause damage to surrounding areas, such as the bladder, urethra, blood vessels, and nerves. It increases the risk of infection and blood clots in the legs. Some women have such large fibroids that an open incision is necessary, and a laparoscopic approach cannot be preformed. Fibroids are very vascular; there are numerous small and large vessels within the fibroid tumors. This means that there is a chance of heavy blood loss, or even uncontrolled bleeding during the surgery. UAE blocks the blood vessels within the

Most can go back to work within a week. After UAE there is significant cramping for 1–3 days, then mostly fatigue for up to 5–7 days. Most women go back to their usual activities within a week.

Many patients report a significant reduction of their symptoms within a very short time, often as quickly as the next menstrual cycle. Uterine fibroid embolization is an important fibroid treatment option, a real alternative to a hysterectomy. It has the advantage of preserving the uterus, stopping the heavy bleeding, limiting the need for pain medication, eliminating long recovery times, and more.

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ONE OF THE MOST IMPORTANT OF THESE ADVANTAGES, OF COURSE, IS THAT YOU DON'T HAVE TO LOSE YOUR UTERUS, AS YOU DO WITH HYSTERECTOMY.

fibroids, rendering them avascular.

In patients with very large or numerous fibroids, a combined procedure can be performed.

As a woman and a doctor who specializes in interventional radiology and UFE, one of the main reasons I'm writing this EBook is to educate women about the treatment options for uterine fibroids. My >10 years of experience performing UFE, and in-depth consultations with women have convinced me that for many, UAE is an excellent option.

First, UFE is so minimally invasive that it does not have the risks asso- ciated with invasive surgery. It requires no "cutting" or large incisions, or even general anesthesia, which always incurs some degree of risk. Second, recovery time after uterine fibroid embolization is much less than after the other surgical options. My UFE patients are showering, standing up, eating normally, and going home much earlier than patients who have hysterectomies or other, more invasive surgeries.

WHEN SHOULD YOU BE SCREENED FOR FIBROIDS, OR SEEK TREATMENT?

If you have heavy bleeding, pelvic pressure, or frequent urination, you should be screened to find out whether you have uterine fibroids. If you know that you have fibroids, when they become symptomatic, or if the symptoms worsen, they should be treated. See your doctor or a uterine fibroid treatment specialist if you have:

- Overly heavy or prolonged periods
- Constant pressure or heaviness in the pelvis
- A palpable mass in the lower pelvis
- Enlarged uterus and abdomen
- Difficulty emptying your bladder



We hope that this information has been useful and has helped you better understand the common symptoms and current treatment options for uterine fibroids. Advanced Vascular Centers is a national medical group specializing in interventional radiology. Our team of highly-skilled physicians, dedicated providers, and creative administrators are committed to creating an environment that prioritizes patient experience, positive results, and advanced care.

Dr. Mary Costantino is the Medical Director of the Advanced Vascular Centers - Portland location and is a leading voice in non-invasive fibroid treatments.



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