A Focus on Women’s Reproductive Health

Gloria Richard-Davis, MD, talks uterine fibroids and their effect on fertility and pregnancy

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A well-known fertility expert, Gloria Richard-Davis, MD, is also a professor in the department of ob-gyn at the University of Arkansas for Medical Sciences. In this capacity, she. has treated many women with uterine fibroids who want to have children. Ordinarily, these noncancerous growths don’t affect a woman’s ability to get pregnant. But under certain circumstances fibroids can cause a woman to become infertile or lose her baby. In addition, some types of fibroids trigger very heavy menstrual bleeding. Here, Richard-Davis explores the issue with Real Health.

When do uterine fibroids affect a woman’s fertility and in what ways does this happen?

Fibroids can be located in the wall of the uterus, which we call intramural; they can be just outside the lining of the uterus, which is subserosal, and then there are those that are deeper in the wall and extend into the uterine cavity, or those found only in the cavity—called submucosal fibroids. These submucosal fibroids are the ones that really interfere with conception because they sit in the cavity where the fertilized embryo is supposed to attach and implant. In addition, the ones that are in the wall—the intramural ones—can push right up the cavity and potentially also cause a problem with implantation, or fibroids that are large to create some other physiological changes that we can’t necessarily account for. Also, there is evidence to suggest that fibroids over five centimeters (about two inches) adversely affect pregnancy success rates. But in terms of fertility, it’s really the submucosal and the larger fibroids that we get concerned about.

Could these fibroid issues lead to miscarriage?

Yes, these problems could possibly lead to miscarriage. Submucosal fibroids can interfere with implantation and establishment of adequate blood supply to the placenta. So, they may cause worry with first trimester losses most commonly. We also know that in pregnancy a woman’s estrogen and progesterone levels go up, and so there tends to be an enlargement in fibroids during pregnancy. This elevates the risk of preterm labor and pain during pregnancy. Fibroids may also become somewhat necrotic—dead tissue—because they outstrip their blood supply, so those are all potential complications in pregnancy.

How often do you see pregnant women, or individuals who want to have kids, coming in with these more extreme symptoms from fibroids?

It is very common in my practice for fertility patients with fibroids to come in saying that they've been unable to get pregnant. The uterine fibroids may deform the uterine cavity, or they might be pretty significant in size. Typically, a patient with small fibroids will get pregnant with no problem. The ones who show up in my practice are those that have a problem, or it may be a patient who has gotten pregnant and had repeated miscarriages or has had miscarriages later in pregnancy when you don't typically see that happening, such as in the second trimester. The assumption is that the fibroids contributed to that late miscarriage because the pregnancy was normal otherwise.

What treatment options do you usually recommend to patients with fibroids?

First, I factor in their reproductive plan along with symptoms helps to guide the discussion of options. Unfortunately, we don't have a medical option for fibroids. There are medications that we can use to treat symptoms. For example, one of the common complaints of patients with fibroids is very heavy menstrual bleeding to the extent that they become severely anemic. Many women end up with blood transfusions related to this problem and there are medications that we can use to reduce the menstrual bleeding.

We start out with a simple treatment, such as having the patient use birth control pills. But obviously if somebody is trying to get pregnant, that's not an option. However, there's a newer drug that was just approved last year. It is a combination of an oral GnRH antagonist which blocks the release of estrogen and progesterone from the ovaries and shrinks the fibroids. But the drug also includes some other ingredients, which are similar to those hormones, that keep patients from experiencing menopausal symptoms.

In addition, there are also older drugs that have been on the market too. But frequently, those are only used for pre-surgical management of fibroids to prepare women for a specific surgical procedure.

Beyond medical management of symptoms, we move into surgical and interventional procedure. Only surgical myomectomy is considered reproductive sparing and recommended if a woman plans a future pregnancy. There are multiple surgical approaches to removing fibroids dependent on location: laparoscopic, hysteroscopic, abdominal/laparotomy.

Non-surgical options may include uterine artery embolization, MRfUS (MR-guided focused ultrasound), cryotherapy. Researchers continue to look for successful non-surgical reproductive sparing options.

Ultimately, hysterectomy or removal of the uterus (not ovaries) is the definitive treatment.

Typically, how long does it take for fibroids to shrink when medications like these are being used?

Maximum shrinkage of a fibroid is usually achieved by the second month a medication is taken either by injection or orally.

What do you think would help to improve health outcomes for women with uterine fibroids and their effect on fertility and pregnancy?

We really do need additional research. Fibroids are so common, yet we don’t really know a lot about them. For example, what’s their growth trajectory? Why do some women have a solitary fibroid while others have so many in their uterus? Also, some women may have fibroids that have existed for years that haven’t changed while others develop fibroids that undergo rapid growth. We don’t have enough data to show what can really happen with fibroids. Maybe, with those pieces of information, we can improve consultations and, hopefully, create some sort of medical treatment that we can use longer term, which would control fibroid growth and allow women to complete their reproduction before having to opt for surgical interventions.

Vice President Kamala Harris introduced a bill when she was in the Senate, so, hopefully, we will eventually see more funding for uterine fibroids research. But with women there’s also the challenge of pregnancy in clinical trials. Most clinical trials want to exclude pregnancy, and so that becomes an obstacle when scientists are trying to look at the impact of any kind of treatment on pregnancy or on the ability to get pregnant.

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