

# HMB\* Associated with UF\*\* Treatment Landscape

Various options are available for the management of symptomatic uterine fibroids. Each treatment has benefits and drawbacks. It's important to have an open conversation with your healthcare provider about your symptoms and treatment goals. This can help your healthcare provider find the right treatment plan for you and your specific needs.



Treatment Class	+ Description	i Benefits	! Risks
<b>Medical Treatment</b>			
<b>Hormonal Contraceptives (birth control)</b>	<p>A combination of an estrogen and a progestin or a progestin alone</p> <p>Many are available as tablet to be taken by mouth<sup>1</sup></p> <p>Also available as a vaginal ring or skin patch<sup>11</sup></p>	<ul style="list-style-type: none"> <li>• May reduce menstrual bleeding<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Possible side effects include water retention, headaches, breast tenderness<sup>1</sup>, spotting, breakthrough bleeding<sup>6</sup></li> <li>• May increase the risk of heart attacks, clot, stroke, liver tumors and gallbladder disease<sup>1</sup></li> </ul>
<b>Progestin-Releasing Intrauterine Devices</b>	<p>Long-lasting contraception device that is inserted / placed into the uterus (IUD)<sup>1</sup></p>	<ul style="list-style-type: none"> <li>• Minimal whole-body effects</li> <li>• Effective for a number of years after insertion of device into uterus</li> <li>• May reduce menstrual bleeding<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Possible side effects include acne, spotting, mood swings, breast tenderness</li> <li>• IUD may fall out of uterus partially or completely</li> <li>• Not recommended for use if the shape of the uterus is distorted / altered by the presence of a uterine fibroid<sup>1</sup></li> </ul>
<b>GnRH Agonists</b>	<p>Treatment used to decrease the size of uterine fibroids before surgery or in women approaching the time when their menstrual cycles stop (menopause)<sup>5</sup></p> <p>Available as an injection or spray into the nose<sup>1</sup></p>	<ul style="list-style-type: none"> <li>• Decreases blood loss, surgical time, and recovery time<sup>7</sup></li> <li>• Reduction in uterine fibroid size</li> <li>• Reduction in the size of the uterus</li> <li>• Reduction in menstrual bleeding and pain with menstruation<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Possible side effects include hot flush, night sweat, headache, inability to sleep, depression</li> <li>• Can result in bone loss</li> <li>• Duration of use is limited (but may be extended with the addition of hormonal add-back therapy)</li> <li>• Flare of symptoms at the start of treatment<sup>1</sup></li> </ul>
<b>GnRH Antagonists</b>	<p>Dials down estrogen and progesterone levels<sup>1,14</sup></p> <p>Taken by mouth<sup>1,14</sup></p>	<ul style="list-style-type: none"> <li>• Reduction in heavy bleeding due to uterine fibroids<sup>1,14</sup></li> <li>• May improve low hemoglobin levels<sup>13,14</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Possible side effects include hot flush, headache, fatigue<sup>13,14</sup></li> <li>• Risk of continued bone loss after discontinuation, which may not be able to be fully recovered<sup>1,14</sup></li> </ul>
<b>Tranexamic Acid*</b>	<p>Anti-fibrinolytic drug can help to slow menstrual bleeding quickly<sup>11</sup></p> <p>Taken by mouth<sup>1</sup></p>	<ul style="list-style-type: none"> <li>• Decreases uterine bleeding<sup>1</sup></li> <li>• Taken only during the menstrual period or only during the times when the period is heavy<sup>11</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Risk of uterine fibroid clotting and necrosis leading to pain and fever<sup>1</sup></li> <li>• Should not be taken with combination hormonal contraceptives<sup>4</sup> because of increased risk of blood clots, stroke, and heart attack when taken together<sup>11</sup></li> </ul>
<b>Procedural Treatment</b>			
<b>The choice of surgery and technique could depend on many factors for your individual case</b>			
<b>Uterine Artery Embolization</b>	<p>Injection of tiny particles into the uterine artery, which stops blood flow to the fibroid<sup>7,11</sup></p>	<ul style="list-style-type: none"> <li>• Surgery done using small incisions (cuts) and a few stitches<sup>7</sup></li> <li>• Treats symptoms caused by fibroids<sup>1</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Possible minor complications: injection access, clotting event, and infection<sup>11</sup></li> <li>• Possible side effects: abdominal pain, vaginal discharge, and fever<sup>11</sup></li> <li>• Not suitable for certain types of fibroids<sup>11</sup></li> <li>• Not an option for women with overactive thyroid</li> <li>• High repeat operation rate<sup>1</sup></li> <li>• Requires specialized radiologist and equipment<sup>1</sup></li> </ul>
<b>MRI-Guided Focused Ultrasound Surgery</b>	<p>A heating technique using MRI guidance to direct ultrasonic energy to destroy fibroids<sup>3</sup></p>	<ul style="list-style-type: none"> <li>• Surgery done using small incisions (cuts) and a few stitches</li> <li>• Improves fibroid size and decreases heavy menstrual bleeding<sup>11</sup></li> <li>• Preserves fertility<sup>4</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Not to be used in patients for which MRI procedures are not recommended</li> <li>• Low rate of complications. Rarely, results in<sup>3</sup>: <ul style="list-style-type: none"> <li>- Burns to the skin on abdomen</li> <li>- Damage to tissues and structures near the fibroid targeted for treatment</li> <li>- Nerve damage causing temporary back or leg pain after the procedure</li> <li>- Blood clots in legs</li> </ul> </li> </ul>

Treatment Class	+ Description	i Benefits	! Risks
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## Procedural Treatment

The choice of surgery and technique could depend on many factors for your individual case

<b>Myolysis</b>	Destruction of uterine fibroids and shrinking of surrounding blood vessels by very low or very high temperatures by a cold instrument, electrical radiofrequency, laser, or high-intensity focused ultrasound <sup>6</sup>	<ul style="list-style-type: none"> <li>• Surgery is done using small incisions (cuts) and a few stitches<sup>6</sup></li> <li>• Shrinks or dissolves fibroids<sup>6</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Limited to treating few and small uterine fibroids<sup>6</sup></li> <li>• Risk of scarring or causing tissues to stick together causing adhesions<sup>6</sup></li> <li>• May need to repeat procedure to remove or shrink fibroids<sup>6</sup></li> <li>• Recommended for women who do not wish to preserve fertility<sup>6</sup></li> </ul>
<b>Endometrial Ablation</b>	Destroys a thin layer of the lining of the uterus  Approaches include: <ul style="list-style-type: none"> <li>• Radiofrequency</li> <li>• Freezing</li> <li>• Heated fluid</li> <li>• Heated balloon</li> <li>• Microwave energy</li> <li>• Electrosurgery<sup>8</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Surgery is done using small incisions (cuts) and a few stitches<sup>8</sup></li> <li>• Reduction of menstrual bleeding to none or lighter levels<sup>8</sup></li> </ul>	<ul style="list-style-type: none"> <li>• May cause abdominal pain, nausea, vomiting, and fever<sup>8</sup></li> <li>• With some methods, risk of burns to the vagina, vulva, and bowel<sup>8</sup></li> <li>• Recommended for women who do not wish to preserve fertility. Pregnancy occurring after an ablation may lead to miscarriage and other problems</li> <li>• Sterilization or other birth control methods are recommended until menopause<sup>8</sup></li> <li>• Should not be used for women who have reached menopause<sup>8</sup></li> <li>• Not recommended for women with uterine or endometrium disorders, endometrial hyperplasia, cancer of the uterus, recent pregnancy, or infection of the uterus<sup>8</sup></li> </ul>

## Surgical Treatment

The choice of surgery and technique could depend on many factors for your individual case

<b>Myomectomy</b>	Surgical removal of fibroids while leaving the uterus in place <sup>2</sup>  Surgical approaches include: <ul style="list-style-type: none"> <li>• Hysteroscopy</li> <li>• Laparoscopy</li> <li>• Laparotomy<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Surgery can be done using small incisions (cuts) and a few stitches<sup>2</sup></li> <li>• Removal of fibroids that lead to pain or pressure<sup>10</sup></li> <li>• Removal of submucosal fibroids (refer to image) may improve chances of having a baby<sup>9</sup></li> </ul>	<ul style="list-style-type: none"> <li>• New fibroids may develop<sup>2</sup></li> <li>• After myomectomy, if a woman gets pregnant, she may need to deliver via C-section<sup>9</sup></li> <li>• Uterine scarring may affect future pregnancy<sup>9</sup></li> <li>• Risk of infection, scar tissue, infertility due to scarring, injury to bladder or bowel, and may require a hysterectomy during the procedure if bleeding cannot be controlled upon fibroid removal<sup>9</sup></li> </ul>
<b>Hysterectomy</b>	Surgical removal of the uterus. If needed; the cervix, ovaries, and fallopian tubes may also be removed <sup>12</sup>  • Hysterectomy is generally considered for women with HMB who have not experienced relief from medical treatment or less invasive surgeries <sup>10</sup>  Surgical approaches include: <ul style="list-style-type: none"> <li>• Transabdominal</li> <li>• Transvaginal</li> <li>• Laparoscopic<sup>10</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Definitive treatment because the whole uterus is removed<sup>12</sup></li> <li>• No fibroid recurrence or development of new fibroids<sup>10</sup></li> <li>• Removing the source of estrogen (i.e., ovaries) will reduce heavy menstrual bleeding and fibroid growth<sup>12</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Surgical risks related to the procedure and anesthesia<sup>10</sup></li> <li>• Removing ovaries sends the body into a full menopausal state and is associated with menopause symptoms such as hot flush. Early surgical menopause can increase the risks of osteoporosis, heart disease, and death at a younger age<sup>12</sup></li> <li>• Considered a major surgery associated with short- and long-term complications, some of which may not show up until a few days, weeks, or even years after surgery<sup>10</sup></li> <li>• Removing the uterus is not reversible and means that you can no longer become pregnant<sup>5</sup></li> </ul>

\*HMB=heavy menstrual bleeding \*\*UF=uterine fibroids

**References:**

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