

# Evaluation and Management Trends in Patients With Uterine Fibroids

## Executive Summary

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Uterine fibroids, also known as leiomyomas, are the most common benign uterine tumor in women of reproductive age.<sup>1</sup> The lifetime prevalence of uterine fibroids is greater than 80% among African American women and nearly 70% among Caucasian women.<sup>2,3</sup> Although many fibroids are detected incidentally on imaging in asymptomatic women, it is estimated that 20% to 50% of women with uterine fibroids are symptomatic and may seek treatment.<sup>4</sup> The estimated annual cost of uterine fibroids in the US is approximately \$5.9 to \$34.4 billion annually - including direct costs, lost work costs, and the cost of obstetric outcomes attributed to fibroids.<sup>5</sup>

The most common symptom of uterine fibroids for which patients seek treatment is abnormal uterine bleeding, usually excessive menstrual bleeding.<sup>6</sup> Other symptoms of uterine fibroids include pelvic pressure, bowel dysfunction, urinary urgency and frequency, urinary retention, low back pain, constipation, and dyspareunia.<sup>7,8</sup> Treatment of uterine fibroids may include pharmacologic therapy or surgical procedures, including hysterectomy, uterine artery embolization, and myomectomy.<sup>4,9</sup> One study found that gynecologists who do not discuss multiple treatment options, including non invasive treatment options, for uterine fibroids, may experience a loss of patients due to patient dissatisfaction.<sup>10</sup> Due to the evolving paradigm in the management of uterine fibroids, clinicians would benefit from emerging evidence regarding risk factors associated with uterine fibroids, the availability of minimally invasive treatment options, and the necessity to tailor therapy to patient specific needs.

## Educational Focus: Gaps, Learning Objectives

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**Practice Gap #1: Many clinicians may not be aware of the multiple risk factors associated with the development of uterine fibroids, which may assist in diagnosis when a patient reports relevant symptoms**

<b>Current Practice</b>	The cause of uterine fibroids is not well understood, but commonly identified risk factors for the development of fibroids include a woman's age and ethnicity. African American women have a greater burden of disease, including a higher prevalence, more severe disease, and worse treatment outcomes than Caucasian women. <sup>11</sup> Increasing age up to menopause is also considered a major risk factor for fibroids. <sup>12</sup>
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<p><b>What Should Happen</b></p>	<p>Recognition should increase that both reproductive and environmental factors influence the risk of uterine fibroid development.<sup>12</sup> Increasing parity is associated with a decreased risk of fibroid development, potentially through elimination of fibroids as the uterus involutes post partum.<sup>13,14</sup> The use of oral contraceptives or progestin-only injectable contraceptives are also associated with a decreased risk of fibroids.<sup>13,15</sup> Other factors that may increase the risk of fibroid development include early menarche, hypertension, and family history.<sup>13,15</sup> Observational data suggests that dietary factors, such as an increased consumption of fruit, vegetables, and low-fat dairy products, may be associated with a reduced risk of uterine fibroids.<sup>16</sup> The Comparing Options for Management: Patient-centered Results for Uterine Fibroids (COMPARE-UF) nationwide registry (<a href="http://www.compare-uf.org">www.compare-uf.org</a>) is a new ongoing registry designed to understand diagnostic, treatment and outcome disparities and compare the effectiveness of fibroid treatments in different populations.<sup>17</sup></p>
<p><b>Learning Objective</b></p>	<ul style="list-style-type: none"> <li>• Identify emerging risk factors for the development of uterine fibroids</li> <li>• Apply understanding of relevant risk factors to patient assessment in clinical practice</li> </ul>

**Practice Gap #2:** Clinicians often identify surgical options, such as hysterectomy and myomectomy, as the main course of action to treat uterine fibroids, but may be unaware of minimally invasive treatment options that are also available.

<p><b>Current Practice</b></p>	<p>Hysterectomy and myomectomy by a variety of routes are frequently used, with hysterectomies accounting for up to 75% of all fibroid procedures, depending on geographic region.<sup>18</sup> Concern has been raised regarding overuse of the procedure, as there is a significant risk of surgical complications and transfusion.<sup>12,18</sup></p>
<p><b>What Should Happen</b></p>	<p>Other minimally invasive treatment options may be less utilized, but should be incorporated into the discussion regarding a patient’s potential treatment plan. Treatment options include extended medical management with medications such as ulipristal acetate, mifepristone, aromatase inhibitors, and GnRH agonists, magnetic resonance image-guided focused ultrasound (MRgFUS), uterine artery embolization, radiofrequency volumetric thermal ablation, and various techniques for</p>

	myolysis. <sup>19</sup>
<b>Learning Objective</b>	<ul style="list-style-type: none"> <li>• Examine options available for the management of uterine fibroids</li> <li>• Compare risks, benefits, and long term outcomes for various treatment modalities</li> </ul>

**Practice Gap #3: Clinicians need guidance in understanding how the breadth of options available to manage uterine fibroids may assist them in identifying therapy tailored to a patient’s specific needs.**

<b>Current Practice</b>	<p>Surgical management, including hysterectomy and myomectomy, remain the main course of therapy in patients with symptomatic uterine fibroids.<sup>20</sup> However, in a recent survey, 79% of women indicated that it was important to have a treatment option that did not involve invasive surgery.<sup>21</sup> Another study found that gynecologists who do not discuss multiple treatment options, including non invasive treatment options, for uterine fibroids may experience a loss of patients due to patient dissatisfaction.<sup>10</sup></p>
<b>What Should Happen</b>	<p>Professional guidelines support tailoring therapy to a women’s preference; uterine-conserving therapy should be an option for women even if there is no plan for childbearing.<sup>22</sup> The treatment of uterine fibroids should be tailored to take into account the size and location of the tumors, the patient’s age, symptoms, desire to maintain fertility, and access to treatment.<sup>7</sup> The ideal treatment should address four goals: relief of signs and symptoms, sustained reduction of the size of fibroids, maintenance of fertility (if desired by the patient), and avoidance of harm.<sup>7</sup></p>
<b>Learning Objective</b>	<ul style="list-style-type: none"> <li>• Differentiate the risks and benefits of various treatment modalities versus the needs of an individual patient circumstance</li> <li>• Recommend appropriate, individualized therapy for patients based on patient preferences and available data</li> </ul>

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