# Does hysterectomy result in better quality of life than myomectomy?

Uterine fibroids affect up to 80% of reproductive-aged women. Although many women are asymptomatic, fibroids can cause pelvic pain, abnormal uterine bleeding, anemia, urinary frequency, infertility, and adverse pregnancy outcomes that can impair quality of life. Fifty percent of women with symptomatic fibroids report a detrimental impact on their mental and physical health (1). Fibroids appear to have a greater impact on quality of life than other chronic conditions, including asthma, irritable bowel syndrome, and gastroesophageal reflux disease (2).

This impaired quality of life is evident across multiple domains, including work performance, sexuality, relationships, as well as emotional and physical well-being (2). Up to 40% of women with symptomatic fibroids report missing work due to fibroid-related symptoms, primarily caused by pain and the need to be near a restroom (2, 3). A staggering 25% believe their fibroids are precluding them from achieving their career potential (3). Many women worry their bodies will never look normal again, and 68%–88% feel ashamed or self-conscious about the appearance of their abdomens (2, 3). Nearly half of women report that their fibroids negatively impact relationships with friends and family, and feel socially isolated due in part to the frequent need to change pads or tampons (2, 3). The emotional consequences of living with fibroids are substantial. Most women report health-related fears, including fear that fibroids will grow (79%), worry about something "inside of them that does not belong there" (69%), and fear about future health problems (63%), including malignant transformation of the fibroids (54%) (3). Despite the tremendous impact of fibroids on quality of life, many women delay seeking care by an average of 3–5 years (3).

The profound negative effects of fibroids on health and well-being mean that surgery has the potential to positively impact the lives of affected women. Hysterectomy and myomectomy have been shown to improve quality of life (4); however, data comparing long-term outcomes after myomectomy and hysterectomy are rare. In this issue, Wallace et al. (5) compare quality of life 1 year after hysterectomy and myomectomy in a prospective cohort of 1,113 premenopausal women with symptomatic fibroids. The results of this multicenter, racially diverse cohort support that both procedures result in decreased symptom severity and improved quality of life across multiple domains, including energy/mood, self-consciousness, and sexual function. They conclude that quality of life scores are higher, and symptom severity scores are lower, after hysterectomy compared with myomectomy. When stratified by route of surgery, these results only apply to the minimally invasive approach; no difference was seen between the two procedures when approached abdominally.

Wallace et al. (5) attribute this observation in part to the potential ability for complete removal of all fibroids in an open procedure. The fact that 30% of fibroids were removed by hysteroscopy and 40% by laparoscopy/robotically suggests a low fibroid burden. In this study the median number of fibroids (interquartile range) was two (1, 3). These results may not be observed in women with a higher fibroid burden. The clinical significance of the differences in quality of life and symptom severity scores is unclear, particularly given that women who underwent hysterectomy automatically score zero on all questions related to menstrual symptoms. In addition, the women in this cohort chose the surgical procedure with their physicians. The reasons are not detailed in the article. The women who opted for hysterectomy were more likely to report pelvic pain requiring medication, nocturia, bleeding between periods, and prior surgical treatment. It is important to consider that encouraging hysterectomy may not yield the same improvements in quality of life versus a woman who might prefer uterine preservation.

One of the most compelling motivations for choosing myomectomy versus hysterectomy is the preservation of fertility. A survey (3) reported that 43% of women <40 years of age desire future fertility. It is unknown how many women in the current cohort were interested in pregnancy; however, women in the hysterectomy group were more likely to be parous. Those women who were actively trying to conceive or became pregnant during follow-up were excluded from the study. More information is needed regarding the role of fertility in quality of life for women undergoing myomectomy.

Wallace et al. (5) should be lauded for producing one of the largest, prospective cohorts comparing long-term outcomes after myomectomy and hysterectomy. These results emphasize that, although fibroids immensely impact quality of life, women who undergo surgery can look forward to long-lasting improvements in symptoms, self-image, sexual function, and overall mental and physical well-being. Further data are needed to understand motivations for selecting myomectomy versus hysterectomy, and how those motivations impact postoperative outcomes. In addition, given that differences in quality of life after myomectomy or hysterectomy applied only to minimally invasive procedures, the impact of the surgical approach on quality of life also deserves further study. As the medical treatment of fibroids evolves with increased use of selective progesterone receptor modulators and gonadotropin-releasing hormone antagonists, their role as adjuncts or alternatives to surgery must be considered. Finally, fertility concerns and outcomes are bound to play a critical role in quality of life after fibroid treatment, and attention should be paid in future studies to understanding their contribution.

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