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Risk of unplanned hysterectomy at time of myomectomy

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What Is Known Already?

Myomectomy is not necessarily a simple procedure; it can at times be more time-consuming and surgically more difficult compared with a hysterectomy [1]. Major complications that may follow myomectomy include hemorrhage, postoperative hematoma, bowel injury, and emergency hysterectomy [2&3].

For individuals wanting to maintain their uteri, an unplanned hysterectomy can be a devastating complication. However, the risk of and risk factors for hysterectomy at the time of myomectomy have been difficult to elucidate given its rarity. Most studies are case series arising from single institutions, with literature estimates ranging from 0.0005% to 0.4% [4&5]. Other reports have demonstrated that the number, size, and location of the fibroids as well as the mode of surgery can influence the risk of bleeding and other complications [6].

For individuals of reproductive age, submucosal fibroids and/or a large intramural fibroid burden can affect fertility [6&7]

As myomectomy is an option for patients with bothersome fibroid symptoms (e.g. bleeding, bulk); however, data are limited regarding the risk of unplanned hysterectomy at the time of myomectomy.

What Is New?

For the first time a large retrospective cohort study including over 13,000 patients undergoing myomectomy, over 600 centers in the United States was conducted using the American College of Surgeons' National Surgical Quality Improvement Program database from 2010 to 2021 that measures preoperative risk factors and 30-day patient outcomes with the goal of improving quality of surgical care [8].

This study has reported that:

- 1- The risk of unplanned hysterectomy was higher in those undergoing laparoscopic myomectomy compared with an open abdominal or hysteroscopic approach (7.1, 3.2, and 1.9 percent respectively) [8].
- 2- While much lower risks have been reported (<0.4 percent), and expert surgeons at high-volume centers may have fewer conversions to hysterectomy [8].

Implications of This Findings:

This recent study highlights the importance of discussing the risk of unplanned hysterectomy during the informed consent process before myomectomy.

Additionally, appropriate surgical planning or referring and expertise in laparoscopic surgery may help lower the unexpectedly high rates of hysterectomy at planned myomectomy.

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