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12.1 Summary

12.2 Conclusion
Uterine fibroids are slowly growing, solid pelvic tumors [1]. The prevalence ranges between 5.4% and 77% of women, depending on the method of diagnosis [2]. Uterine fibroids mainly originate from individual smooth muscle cells of the uterus [3]. The smooth muscle cells of the uterine blood vessels may also be a source [4]. Although benign, fibroids may have a major impact on other agents have been advocated for the treatment of uterine fibroids. Effectiveness of combined GnRH analogue plus raloxifene administration in the treatment of uterine leiomyomas: a prospective, randomized, single-blind, placebo controlled clinical trial. Hum Reprod. 2002;17:3213–9. Medications for uterine fibroids target hormones that regulate your menstrual cycle, treating symptoms such as heavy menstrual bleeding and pelvic pressure. They don't eliminate fibroids, but may shrink them. Medications include: Gonadotropin-releasing hormone (GnRH) agonists. Medications called GnRH agonists treat fibroids by blocking the production of estrogen and progesterone, putting you into a temporary menopause-like state. This technique can be effective in shrinking fibroids and relieving the symptoms they cause. Complications may occur if the blood supply to your ovaries or other organs is compromised. However, research shows that complications are similar to surgical fibroid treatments and the risk of transfusion is substantially reduced. Radiofrequency ablation. The modern advance in treatment of endometriosis management is tackling the debilitating pain it causes, besides the infertility in patients desiring fertility in reproductive age group. This can be achieved by surgical or medical means, although in most cases a combination of both treatments is required. Usually, long term treatment is required in most cases. 1.3. Management. The approaches used for the treatment of endometriosis currently involve pharmacologic therapies and surgical removal of endometriotic implants. Elagolix is an oral short acting GnRH antagonist that unlike injectable GnRH antagonists produces dose dependent suppression of pituitary and ovarian hormones in women. GnRH antagonists are analogs of the GnRH molecule that act by directly competing for and occupying pituitary GnRH receptors. This blocks access of the GnRH molecule to these receptors, resulting in immediate pituitary suppression of gonadotropin secretion. This avoidance of the initial gonadotropin flare seen with GnRH agonists allows the antagonist to cause a clinical effect much more quickly, generally within 2 weeks. Data are limited for the use of these agents in the treatment of fibroids. Most publications are case reports or small uncontrolled series. However, there is currently one randomized trial comparing the aromatase inhibitor letrozole 2.5 mg/day to GnRH agonist in the treatment of uterine fibroids (Parsanezhad et al. GnRH (LHRH) receptor antagonist, Treatment of uterine fibroids, Treatment of endometriosis-related pain, Treatment of prostate cancer. January 2019. Drugs of the Future 44(2):131. Relugolix is a nonpeptide, orally active small-molecule compound that was recently approved in Japan for the treatment of uterine fibroids. Additionally, it is in phase III trials for endometriosis and prostate cancer. Inhibition of anterior pituitary GnRH receptors results in reduction of the circulating gonadotropins luteinizing hormone and follicle-stimulating hormone, leading to the suppression of estrogen production in women and testosterone production in men.