Voluminous intramural uterine fibroids and especially submucosal uterine fibroids are associated with reduced pregnancy rate and increased abortion rate. Before undergoing Assisted Reproductive Techniques (ART) the myomas should be surgically removed. We have evaluated the efficacy of Ulipristal Acetate (UPA), a selective progesterone receptor modulator (SPRMs), for the preoperative treatment of a symptomatic infertile patient affected by uterine fibromatosis, who was candidated to In Vitro Fertilization (IVF). The patient complained about repeated episodes of menorrhagia, pelvic pain unresponsive to common analgesic treatments, asthenia and infertility for > 1 year. A hysterosono-constrast sonography (HyCoSy) was scheduled. Several small intramural fibroids along with larger fibroids (20-40 mm in diameter) were seen under transvaginal ultrasound (TVUS). Saline infusion showed a markedly distorted uterine cavity due to two submucosal myomas (sized 24 x 26 mm and 39 x 27 mm, respectively) and an intramural myoma (39 x 41 mm). The patient was administered UPA 5 mg/day for 3 months. Both abnormal uterine bleeding and pelvic pain disappeared after 8 days of treatment. The volume of the fibroids was reduced of about 30-40%, as assessed by TVUS and Magnetic Resonance. Under TVUS the two major submucosal myomas measured 19 x 20 mm and 30 x 21 mm, respectively, and the intramural one measured 31 x 32 mm. The hysteroscopic resection of the submucosal myoma was easily conducted using a wire loop. A HyCoSy performed 9 months after the treatment demonstrated a regular and distensible uterine cavity allowing IVF to be subsequently scheduled. Since UPA administration has led to a rapid resolution of symptoms and has facilitated hysteroscopic myomectomy, it can be considered a useful tool for the preoperative management of infertile patients suffering from symptomatic uterine fibromatosis.