SHORT COMMUNICATION

VAGINAL EXPULSION OF A SUBMUCOSAL MYOMA DURING TREATMENT WITH LONG-ACTING GONADOTROPIN-RELEASING HORMONE AGONIST

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SUMMARY

Objective: Gonadotropin-releasing hormone agonist (GnRH agonist) therapy has been useful as an adjunct before myomectomy or hysterectomy for uterine myoma.

Case Report: A 26-year-old woman without sexual exposure was diagnosed with a submucosal myoma and treated with long-acting GnRH agonist. This patient exhibited heavy menstruation and severe anemia for 2 years and consulted our outpatient department. Transabdominal ultrasound demonstrated a 3.5-cm submucosal myoma within the endometrial cavity. The patient showed a marked suppression of serum estradiol concentrations throughout the treatment (< 20 pg/mL at the second dose injection). The volume of the uterus and uterine myoma decreased to two-thirds of the original size at the end of the second dose injection. However, a sudden onset of severe abdominal cramping pain occurred on the 76th day and a ping-pong sized mass was expelled from the vagina. She visited our outpatient department for evaluation, where ultrasound failed to detect the previous submucosal uterine myoma. A 3-year follow-up has been uneventful.

Conclusion: Spontaneous expulsion of submucosal myomas might occur after the administration of GnRH agonist; hence, it may be an acceptable alternative for symptomatic females without sexual exposure. [Taiwanese J Obstet Gynecol 2006;45(2):173–175]

Key Words: gonadotropin-releasing hormone agonist, spontaneous expulsion submucosal myoma

Introduction

Uterine myomas are one of the most common benign tumors in women of reproductive age. In symptomatic cases, treatment has traditionally been surgical, either total hysterectomy (often via the abdominal route or via laparoscopic assisted vaginal hysterectomy) if child-bearing is no longer desired, or myomectomy if fertility is to be preserved; the latter may be complicated by significant blood loss and adhesion formation [1].

Gonadotropin-releasing hormone agonist (GnRH agonist) therapy has been useful as an adjunct before myomectomy or hysterectomy for uterine myoma [1,2]. Expulsion of a uterine submucosal myoma after administration of a GnRH agonist has previously been reported [3], but surgical myoma removal was required. This case is unique since the patient exhibited spontaneous vaginal expulsion of the submucosal myoma and no sequelae were noted thereafter.

Case Report

A 26-year-old woman without sexual exposure exhibited heavy menstruation for approximately 2 years. The patient’s past history was unremarkable and laboratory data revealed normal electrolytes and hepatic-renal
myoma were confirmed based on efficacy and safety parameters assessed [13]. For the purpose of long-term use in women with symptomatic uterine myoma, GnRH agonist/steroid add-back regimens might be a good choice [13].

What caused the spontaneous expulsion of the uterine myoma in this patient is not clear and is difficult to define. A possible explanation may be rapid tumor shrinkage with discordance between the submucosal myoma and the surrounding tissue. Of utmost importance, the size of the uterine myoma was relatively small (shrinkage to 2 cm during treatment). These factors may have contributed to the unusual event of spontaneous expulsion of the uterine myoma.

In conclusion, administration of GnRH agonist in patients without sexual exposure could be an alternative choice in the treatment of submucosal myomas.

References


Discussion

Women without sexual exposure who exhibit heavy menstruation due to submucosal uterine myomas are sometimes difficult to deal with because of their unwillingness to undergo surgery (myomectomy, total hysterectomy, hysteroscopic myomectomy). The value of a low-dose combination of estrogen and progesterone in managing uterine myoma is still controversial because study results are not consistent [4]. Oral pills may be an alternative, depending on the patient’s willingness.

The association between myomas and estrogen-dependency is well established [5–8]. It has been reported that myomas are a hormone-dependent disease, and menopause often causes regression of the myoma. Since the patient had no previous sexual exposure and was diagnosed with a submucosal myoma with severe anemia, we considered using the strategy of medical castration in an attempt to relieve her symptoms and signs. The advantages of GnRH agonist therapy are that it constitutes a medical, reversible, and noninvasive therapeutic option that can be used for GnRH- and/or estrogen-dependent tumors [9–12].

GnRH agonist therapy is suggested to facilitate surgery by shrinking tumor size and decreasing blood loss. In addition, estrogen–progestin add-back regimens in using GnRH agonist treatment for women with uterine anemia, we considered using the strategy of medical dependency is well established [5–8]. It has been reported was diagnosed with a submucosal myoma with severe menopause often causes regression of the myoma. Since the patient had no previous sexual exposure and 

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profile. However, hemoglobin 5.6 g/dL was noted (normal, 12–14 g/dL). Transabdominal ultrasound demonstrated a 3.5-cm submucosal myoma. Initial therapy included a 12-day regimen of dehydroxyprogesterone (Provera®) 10 mg daily from menstrual day 16 to 27 as well as ferrum replacement. After 3 months, heavy menstruation and anemia persisted; oral pills were suggested, but the patient refused. After a detailed discussion and considering the potential risk of surgical intervention, long-acting GnRH agonist was suggested.

The patient reached a menopausal state after the first dose of GnRH agonist was administered, without significant menopausal symptoms or signs. Regular follow-up revealed that the size of the submucosal myoma had decreased to two-thirds the original size after the second-dose injection. During the course of treatment, the patient suffered from acute abdominal cramping pain on the 76th day after receiving the first-dose injection and a ping-pong sized mass was expelled per vagina. She visited our outpatient clinic and transabdominal ultrasound failed to detect the previous uterine myoma. She had normal menstruation for 3 years following discontinuation of an estrogen–progestin contraceptive.
