Case Report

Vaginal Myoma Expulsion after NovaSure Endometrial Ablation

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ABSTRACT

A 46-year old multiparous woman visited a 1-stop clinic for abnormal uterine bleeding. There was a small submucosal type 2 myoma of 2 cm in her normal sized uterus. We treated her using Novasure endometrial ablation. One year later the patient suffered from sudden excessive vaginal bleeding and collapse. A myoma of 4 cm was being expelled from the uterus. Journal of Minimally Invasive Gynecology (2009) 16, 496–497 © 2009 AAGL. All rights reserved.

During the last decade, endometrial ablation has become a very popular treatment for patients with excessive/abnormal vaginal blood loss [1]. It is an effective and safe procedure, and complications are rare [2,3]. Therefore hysterectomy is often avoided.

Since 1994 several second-generation ablation techniques have been developed. The second-generation techniques employ disposable devices that are easy to use. The NovaSure endometrial ablation system (Hologic Europe N.V., Vilvoorde, Belgium) consists of a generator and a 3-dimensional bipolar disposable device. The NovaSure radiofrequency generator is a constant power output generator with a power cut-off limit set at 50 ohms tissue impedance. The device can create a confluent lesion involving the entire interior surface area, within the cavity of the uterus [4].

The literature reveals a high success rate (>90%) [2–5]. The success rate decreases somewhat in the presence of fibroids; however, intramural myomas up to 3 cm in diameter are acceptable for successful treatment of endometrial ablation [6].

To our knowledge no case of vaginal expulsion of a myoma after the NovaSure procedure or any other form of endometrial ablation has been described. However, vaginal expulsion of an intramural or a submucosal myoma is a well-known complication after uterine artery embolization (UAE). It is described in 3% to 6% of women after UAE and occurs mostly days or weeks after embolization [7–9].

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However, a part of the myoma, mostly the myoma “stem,” was still located in the uterine cavity. Therefore a supracervical laparoscopic hysterectomy was performed as previously planned. Because of the necrosis, extra antibiotics were prescribed. The recovery was successful, and the patient returned home after 3 days. During follow-up, no further bleeding occurred, and the patient was satisfied. Pathologic examination revealed necrotic myoma tissue.

Discussion

Vaginal expulsion of myomas is a known complication after uterine artery embolization, after administration of a gonadotropin-releasing hormone agonist, and after pregnancy, which can be explained by the (sudden) cutoff or decrease of myoma blood supply [7–12]. In the case described, it is postulated that because of endometrial destruction, the myoma migrated into the uterine cavity. The mechanism could consist of a cutoff of blood supply after ablating the mucosal layer covering the myoma or because of destruction or damage of the capsule surrounding the myoma. In this case we presume it was a combination of both because there was a certain amount of necrosis on the outside of the myoma.

Conclusion

This case report shows that migration of myomas is a possible complication after endometrial ablation with NovaSure. This should be considered, and counseling should be adjusted for patients with intramural uterine myomas opting for NovaSure endometrial ablation.

References