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BRIEF COMMUNICATION

Postmenopausal Spontaneous Umbilical Endometriosis: A Case Report

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Endometriosis is a benign gynecologic disease that highly influences women of childbearing age. It is characterized by ectopic endometrial tissue. Primary umbilical endometriosis is a rare condition. It is a benign disease with endometrial tissue in an abnormal site in the navel. It may be accompanied with pain in the navel and a discolored bump. Among all locations with the potential for endometriosis, the navel has less than 1% incidence of primary umbilical endometriosis. In the present study, we reported a rare case of umbilical endometriosis revealed via a biopsy performed for a 49-year-old menopausal woman with the complaint of pain in the navel who underwent surgical excision and a biopsy after a scan.

Key Words: Endometriosis, Postmenopause, Umbilicus

INTRODUCTION

Endometriosis is a common gynecologic disease related to sterility and chronic pelvic pain [1]. This has been regarded as a disease appearing in premenopausal women in general [2].

Although a lot of theories have been presented to explain the cause of endometriosis, there is still an absence of theory that can explain all pathological physiological aspects of endometriosis [1]. Endometriosis can break out not only in the ovary, but also in the uterosacral ligament, the pouch of Douglas, and other pelvic organs. It can even be found in extraperitoneal sites (cervix, vagina, vulva, lung, navel, and surgical wound sites) [3]. It is not common that umbilical endometriosis occurs after surgical treatment. The incidence of primary umbilical endometriosis is 0.5% to 1.0% of all endometriosis sites [3,4].

CASE REPORT

A 49-year-old healthy menopausal woman visited the hospital with a bump in the navel accompanied by pain. She was diagnosed with menopause two years ago. She had no surgical treatment history in the past. She did not even suffer from cramps or regular umbilical pain before menopause.

According to physical examination, the naval had a light 0.5-cm bump with pain. Computed tomography (CT) of the abdomen and pelvis using contrast media revealed a 0.5-cm bump without affecting the myometrium in the navel. In the CT, the adnexa including the uterus and both ovaries did not show a specific case (Fig. 1). An excision of the bump in the naval was performed by vertical incision on bump, incision depth was 2 cm and excision mass size $2 \times 1.5 \times 1.5$ cm under general anesthesia with orotracheal intubation. Histological examination of biopsy revealed a lesion in the superficial dermis comprising a single dilated glandular structure surrounded by cellular endometrial-type

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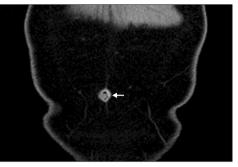


Fig. 1. The computed tomography finding reveals a small umbilical tissular nodule of 0.5 cm (arrow), not exceeding the muscle plane.

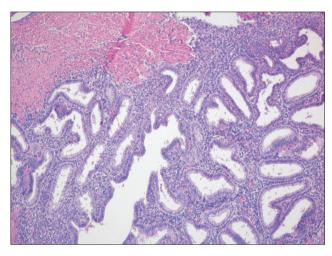


Fig. 2. Histological examination revealed a lesion in the superficial dermis comprising a single dilated glandular structure, surrounded by cellular endometrial-type stroma (H&E, ×100).

stroma (Fig. 2).

In gynecologic examination that she had a month after the surgery, estradiol level was measured at 17 pg/mL and follicle-stimulating hormone level was 39 mIU/mL. No specific finding was revealed in the adnexa including the uterus and both varies in ultrasonography. Thus, gonadotropin releasing hormone (GnRH) agonist was started. A total of six GnRH agonist treatments were applied. After these treatments, she did not complain of pain in the navel anymore. A follow-up is in progress.

DISCUSSION

Endometriosis is a benign disease that can appear in 6 to 10% of women of childbearing age [5]. Endometriosis in the pelvis is classified into three clinical aspects: superficial implants of ovary and pelvic peritoneum, endometriosis of ovary, and rectovaginal nodules [6]. Since there is to mechanism to clearly explain endo-

metriosis in premenopausal women, it can be thought that there is no theory to explain endometriosis in postmenopausal women either [1]. A possible supposition is that a patient might have asymptomatic endometriosis before menopause or she did not receive laparoscopic treatment even when she had symptomatic endometriosis. Endometriosis may develop after menopause in these two cases [1]. This is evidence implying that postmenopausal endometriosis appears in patients with premenopausal endometriosis [1].

Endometriosis has long been considered an estrogendependent disease. Postmenopausal endometriosis can increase due to administration of phytoestrogen or increased estrogen level in the blood after hormone therapy [1]. Phytoestrogens have been known to exert estrogenic effects on the uterus, breast, and pituitary to support growth of endometriotic deposits [6]. Phytoestrogens are over-the-counter drugs used to relieve menopausal symptoms in menopausal women with premenopausal endometriosis. Endometriosis may continue [1]. This is because the concentration of estrogen receptors in endometriotic tissues does not change in aged patients [1].

The incidence of cutaneous endometriosis is less than 5.5% among all development aspects of endometriosis [7]. Less than 30% of patients with cutaneous endometriosis do not have a former surgical history. Such case is called primary cutaneous endometriosis [8]. In this case, the navel is a commonly affected site [9]. The navel is an unusual site where endometriosis occurs. This occurs in 0.5% to 4% of women with endometriosis [3]. Umbilical endometriosis is characterized by an umbilical bump with regular pain in a former surgical incision of a woman of childbearing age [10]. Its typical symptoms are regular pain, discharge, bleeding or swelling related to the menstrual cycle of the lesion. However, the lesion may be completely asymptomatic [8]. Definitive treatment is surgical excision [9]. Hor-

mone therapies such as gonadotropin releasing hormone agonists, oral contraceptives, and danazol can be applied to reduce the size of the lesion before surgery or to improve symptoms of pelvic endometriosis [9]. All patients with umbilical endometriosis are recommended to have a gynecological examination to identify pelvic endometriosis because 15% of patients with umbilical endometriosis accompany pelvic endometriosis [9]. An interesting thing about this case was that primary umbilical endometriosis appeared in a menopausal woman who had no surgical history in the past or any suspected symptom of endometriosis. Another interesting thing was that she did not receive hormone treatment to relieve menopausal symptoms.

If postmenopausal women have cutaneous lesion with regular pain or a regular pelvic pain when they are receiving hormone treatment, or not receiving these treatments, endometriosis needs to be considered so that they can obtain proper treatment.

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CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

REFERENCES

- 1. Shah D. Postmenopausal endometriosis: an enigma revisited. J Midlife Health 2014; 5: 163-4.
- 2. Bendon CL, Becker CM. Potential mechanisms of postmenopausal endometriosis. Maturitas 2012; 72: 214-9.
- Pariza G, Mavrodin CI. Primary umbilical endometriosis (Villar's nodule) - case study, literature revision. Chirurgia (Bucur) 2014; 109: 546-9.
- Leyland N, Casper R, Laberge P, Singh SS; SOGC. Endometriosis: diagnosis and management. J Obstet Gynaecol Can 2010; 32(7 Suppl 2): S1-32.
- 5. Giudice LC, Kao LC. Endometriosis. Lancet 2004; 364: 1789-99.
- Cotroneo MS, Lamartiniere CA. Pharmacologic, but not dietary, genistein supports endometriosis in a rat model. Toxicol Sci 2001; 61: 68-75.
- 7. Kyamidis K, Lora V, Kanitakis J. Spontaneous cutaneous umbilical endometriosis: report of a new case with immunohistochemical study and literature review. Dermatol Online J 2011; 17: 5.
- Fernández-Aceñero MJ, Córdova S. Cutaneous endometriosis: review of 15 cases diagnosed at a single institution. Arch Gynecol Obstet 2011; 283: 1041-4.
- 9. Gin TJ, Gin AD, Gin D, Pham A, Cahill J. Spontaneous cutaneous endometriosis of the umbilicus. Case Rep Dermatol 2013; 5: 368-72.
- Khaled A, Hammami H, Fazaa B, Zermani R, Ben Jilani S, Kamoun MR. Primary umbilical endometriosis: a rare variant of extragenital endometriosis. Pathologica 2008; 100: 473-5.