CASE REPORT

Postcoital bleeding due to cervical endometriosis

Mehmet Murat Seval,¹ Sabri Cavkaytar,¹ Zeliha Atak,¹ Servet Guresci²

¹Department of Obstetrics and Gynecology, Kecioren Education and Research Hospital, Ankara, Turkey
²Department of Pathology, Kecioren Education and Research Hospital, Ankara, Turkey

Correspondence to
 Dr Mehmet Murat Seval,
 muratseval@gmail.com

SUMMARY

Endometriosis of the uterine cervix is a rare lesion that is generally asymptomatic in gynaecological practice. We present a case with postcoital bleeding due to a cervical mass mimicking cervical polyp or fibroma which was histologically proven as cervical endometriosis later. Cervical endometriosis should be considered in the differential diagnosis of cervical masses with postcoital bleeding.

BACKGROUND

Endometriosis of the uterine cervix is a rare benign lesion.¹ Although it is usually asymptomatic and diagnosed retrospectively in histopathology reports, it can also be presented with abnormal cervical smears, gynaecological symptoms such as haemorrhage, postcoital bleeding dysmenorrhoea or dyspareunia. The management varies depending on the severity of the clinical symptoms.² While asymptomatic patients do not require treatment, persistent symptoms should be treated surgically. In this paper we report a postcoital bleeding case of histologically proven cervical endometriosis mimicking cervical polyp or fibroma with a review of the literature.

CASE PRESENTATION

A 28-year-old woman was referred to the Ankara Kecioren Education and Research Hospital, Department of Obstetrics and Gynaecology for intrauterine system application for the purpose of contraception in September 2011. She had two full-term vaginal deliveries and one missed abortion. She had a history of curettage due to missed abortion. She complained of postcoital bleeding and leucorrhoea at admission. She had regular menstrual periods with dysmenorrhoea. The gynaecological examination revealed a 3×2 cm mobile lesion extending to upper vaginal tissue originating from posterior lip of the cervix (figure 1). A 28×21 mm hyperechogenic solid mass at the cervical site was observed by transvaginal ultrasonography. A recent cervical smear was reported as normal. She had a normal gynaecological examination and transvaginal ultrasonography 1 year ago before the admission to our clinic. The differential diagnosis at this point was primarily cervical polyp or fibroma. She was encouraged to have a large excision of the lesion. The procedure was performed under regional anaesthesia. Histological examination of the specimen confirmed cervical endometriosis.

DISCUSSION

Endometriosis is an inflammatory disease that affects 5–10% of women of reproductive age.³ Endometriosis often appears as pelvic peritoneal endometriosis or endometrioma and causes chronic pelvic pain and infertility in women. The incidence of cervical endometriosis has been reported as 1.6–2.4%.¹ The majority of the cases are asymptomatic and usually diagnosed incidentally in the hysterectomy specimen.² However, it may cause abnormal cervical cytology, gynaecological symptoms such as irregular haemorrhage, postcoital bleeding, dysmenorrhoea or even massive and life-threatening haemorrhage.^{4–5} Furthermore, it has been reported as a case of deep infiltrating cervical endometriosis mimicking rectosigmoid cancer.⁶

In our case, we revealed a mobile cervical mass in a patient who has postcoital bleeding and dysmenorrhoea. Postcoital bleeding is also an unusual presentation of cervical endometriosis in the literature.⁷ The cervical endometriotic lesions have been defined as small bluish, bluish-black or fresh red nodules in the literature.² Cervical mass lesions as well as in our case is a rare condition in the form of a cervical endometriosis presentation. Cervical fibroids, endocervical polyp or submucous leiomyoma and premalignant or malignant cervical lesions should be considered in the differential diagnosis in such cases.

It has been advocated that cervical endometriosis is a complication of cervical trauma associated with surgical procedures such as curettage, biopsy and diathermal coagulation.⁸ When we consider the implantation theory proposed by most investigators,⁹ it should not be surprising that cervical endometriosis may develop as a result of invasion of endometrial tissue to the traumatised areas of the cervix during the menstruation. Our patient had a

Figure 1 Cervical lesion originating from posterior lip.

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Figure 2 Endometrial stroma (E) and glands beneath squamous epithelium (S) (HE $\times 40$).

history of curettage due to missed abortion, which may explain the possible pathogenesis. On the other hand, some cases of cervical endometriosis with no history of trauma have also been reported in the literature.² In these cases the abnormal intrinsic properties of eutopic endometrium, embryonic remnants and metaplastic origination might be the other alternative theories for the development of cervical endometriosis.^{10–12}

Although there was no cytopathology as in our case, glandular cells which shaded from cervical endometriotic lesions might be the cause of abnormal smear results. In this condition adenocarcinoma of the endocervix or endometrium should also be included in the differential diagnosis. Furthermore, due to the malignancy potential of the other clinical symptoms, the diagnosis before biopsy or surgery is generally difficult. Thus, cervical biopsy and histopathological evaluation is the best way for the definitive diagnosis of cervical endometriosis. Cervical endometriosis has been defined in two histopathological forms, superficial and deep.¹³ Superficial cervical endometriosis involves the cervical stroma subjacent to the epithelium. When the involvement reaches the outer third of the cervical wall, the rectovaginal septum or serosal surface of the supravaginal portion of the cervix, it is called deep cervical endometriosis. Large endometrial tissue was seen beneath the surface squamous epithelium in our case (figure 2). It was composed of proliferative endometrial glands in endometrial stroma rich with dilated vessels and extravasated red blood cells. The cervical squamous epithelium was intact but showed acute inflammation. The histopathological examination was reported as superficial cervical endometriosis.

Expectant management should be preferable for the asymptomatic patients. Oral contraceptives and gonadotropin-releasing hormone analogues would be the first-line medical treatments to avoid surgery in symptomatic patients.¹⁴ Although medical treatment may be useful to relieve some mild symptoms, surgical treatment should be chosen for the patients with clinical symptoms such as haemorrhage, postcoital bleeding, persistent pelvic pain and dyspareunia. Surgical excision, loop electrosurgical excision procedure, electrocoagulation, cryosurgery and CO₂ laser vapourization are conservative surgical options for the cervical endometriosis.¹⁵ Total hysterectomy is the definitive treatment especially for the patients who have deep cervical endometriosis¹⁶ and should be considered if any other treatment is not beneficial for severely symptomatic patients with massive haemorrhage or coexisting pelvic endometriosis.

As a result, cervical endometriosis should be considered in the differential diagnosis of cervical masses with gynaecological symptoms such as haemorrhage, postcoital bleeding, dysmenorrhoea or dyspareunia.

Learning points

- ▶ Cervical endometriosis should be considered in the differential diagnosis of cervical masses.
- ▶ Cervical endometriosis may cause abnormal cervical cytology, gynaecological symptoms such as irregular haemorrhage, postcoital bleeding or dysmenorrhoea.
- ▶ The mechanisms of pathogenesis for cervical endometriosis are not clear yet.
- ▶ Although medical treatment may be useful to relieve some mild symptoms of cervical endometriosis, surgical treatments such as excision, loop electrosurgical excision procedure, electrocoagulation, cryosurgery and CO₂ laser vapourization should be chosen for the patients with clinical symptoms such as haemorrhage, postcoital bleeding, persistent pelvic pain and dyspareunia.

Competing interests None.

Patient consent Obtained.

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