Polypoid Endometriosis of Cervix: A Case Report

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ABSTRACT

Polypoid endometriosis is an uncommon and distinctive variant of endometriosis with histologic features simulating those of an endometrial polyp which is found most often in the colon and ovary. The cervix is an infrequent site for polypoid endometriosis.

We report a 40-year-old female presented with irregular bleeding and on examination detected to have an endocervical polyp. She underwent polypectomy and histopathological examination suggested polypoid endometriosis. She remained asymptomatic during two years of follow-up.

Polypoid endometriosis is a variant of endometriosis that may be mistaken for a neoplasm on clinical and pathologic examination. There is often a delay in diagnosis resulting in unnecessary suffering and reduced quality of life. Though a rare entity, it should be considered in the differential diagnosis of all cervical polyp.

Keywords: Abnormal uterine bleeding, Cervix, Endometriosis, Polyp

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Introduction

Endometriosis is defined as the presence of endometrial glands and/or stroma in various tissues outside the uterine cavity. Endometriosis affects 10-15% of all women of reproductive age (1). 70% of women with chronic pelvic pain are found to have endometriosis (1). Polypoid endometriosis is an uncommon and distinctive variant of endometriosis with histologic features simulating those of an endometrial polyp which is found most often in the colon and ovary (2,3). The cervix is an infrequent site of endometriosis. The incidence of cervical endometriosis has been reported as 1.6% to 2.4% (4). Polypoid form of endometriosis is a rare presentation. We report a case of cervical endometriosis presenting as an endocervical polyp. A written info consent of the patient was obtained for this purpose.

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Case report

A 40-year-old, para-2 female presented with a history of irregular vaginal bleeding for 1 month (2019). There was no history of dysmenorrhea/dyspareunia. Her past menstrual cycles were normal. She had no prior surgeries and had not received any hormonal treatment for her abnormal vaginal bleeding. General Examination was unremarkable. Per abdomen, the examination was essentially normal. Per speculum examination revealed a 2×2 cm cervical polyp, grayish-white in color with superficial bleeding on touch. On per vaginal examination, the polyp was soft in consistency, uterus was of parous size, mobile and non-tender. No adnexal lump or tenderness was felt. Hence a clinical diagnosis of the cervical polyp was made. On pelvic sonography except for this cervical growth, uterus and adnexa were unremarkable. Her PAP smear test done three years ago was normal. Polypectomy was done and tissue was submitted for histopathological examination.

In the Pathology lab, on grossing a polypoidal mass labeled as endocervical polyp measuring 2.3×2×1 cm was received. The external surface was smooth. Cut section showed focal areas of hemorrhage (Figure 1). Microscopic examination revealed endocervical mucosal polyp histology mixed with foci of endometrial glands and stroma. The glands were small to medium-sized, round to oval, and lined by columnar epithelium with areas of pseudo stratification. The nuclei were round to elongated with evenly distributed fine to dark chromatin. There was no atypia in the glands. The stroma was comprised of small spindle-shaped cells with scanty cytoplasm and minimal mitotic activity. Also seen in the section were large foci of hemorrhage with pigment laden macrophages (Figure 2a and Figure 2b). Immunohistochemistry (IHC) showed CD 10 pos-

itivity in stromal cells (Figure 3). These morphological findings led to a diagnosis of polypoid endometriosis of the cervix.

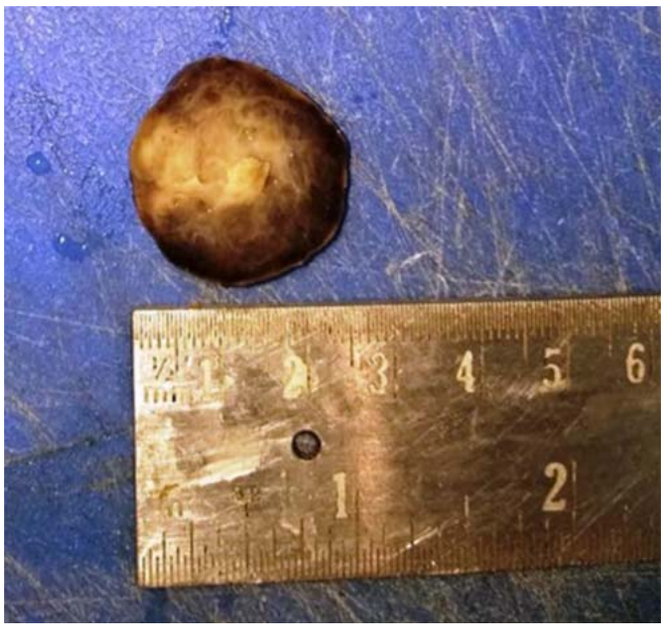

Figure 1: *Polypoidal mass with a smooth external surface*

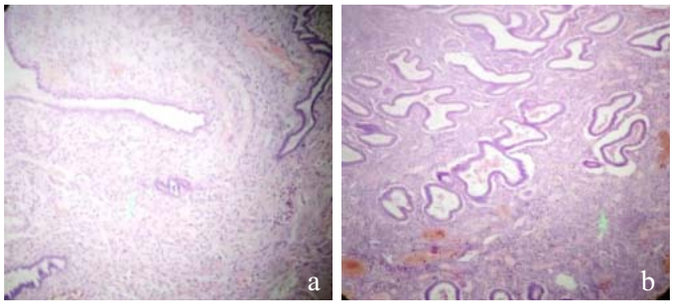

Figure 2: *(a,b) Endocervix with areas of endometrial glands and stroma with foci of hemorrhage*

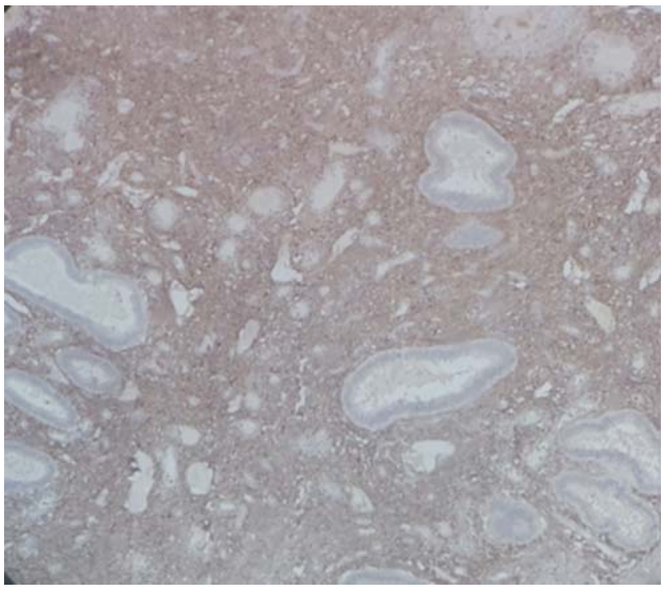

Figure 3: *IHC shows CD 10 positivity in endometrial stroma Polypoidal mass with a smooth external surface*

Discussion

Polypoid endometriosis was first described by Mostoufizadeh and Scully in 1980 (5). In their article on malignant lesions arising in endometriosis, they described two such cases. Two of the earliest well-documented examples were described in the 1950s that involved the colon (6,7). Benz et al described an example of the sigmoid colon polyp that simulated a carcinoma, but they used separate terms to describe the same entity (6).

Although polypoid endometriosis essentially represents a variant of endometriosis, it has several clinicopathologic features that differ to varying degrees from typical endometriosis and cause diagnostic problems. This form of endometriosis is more common in postmenopausal women when compared to traditional endometriosis which is more common in premenopausal women. While the clinical manifestations of endometriosis are dysmenorrhea, dyspareunia, chronic pelvic pain, and infertility, polypoid endometriosis most commonly presents as a mass lesion with abnormal vaginal bleeding, as can be noted in our case. This type of endometriosis may form large, often multiple, polypoid masses that not only simulate malignant tumors during surgery (8) but may also recur after operative removal (9). However, histopathological findings resemble endometrial polyps. The involvement sites, in order of frequency, include the colon, ovary, uterine serosa, cervical and/or vaginal mucosa, ureter, fallopian tube, omentum, bladder, paraurethral, and paravaginal soft tissue and retroperitoneum (9,10).

The endocervical polyp is one of the most common lesions in Gynecology but endometriosis presenting as an endocervical polyp is a rare entity with minimal data available. The most common clinical manifestation for polypoid endometriosis, in cervical or vaginal regions, is increased vaginal bleeding, which was found in our cases. The presumed implantation of endometrial fragments on a previously traumatized cervix is the probable mechanism of pathogenesis of cervical endometriosis. Almost 85% of women have a history of vaginal delivery or curettage (11). The frequent demonstration of glands with tubo-endometrioid or pure tubal metaplasia in posttraumatic cervices supports the concept that it develops as a reparative/ metaplastic process. In those who have not undergone prior invasive procedures like in our case, it may arise from the stem cell rests in the cervical stroma. Its pathogenesis has also been found to be related in general to the use of hormone therapy (estrogen therapy) or tamoxifen. However, our case did not give any history of endometrial curettage or use of estrogen and tamoxifen (12).

The treatment is polypectomy and follows up; as it is known to recur. For two years the patient was under our follow up during which she remained asymptomatic.

Conclusion

Polypoid endometriosis is a distinct form of endometriosis that may be mistaken for a neoplasm on clinical and pathologic examination. This variant of endometriosis occurs over a wide age range but may be seen with greater frequency in postmenopausal women compared with usual endometriosis. In many cases, hormonal factors may play a role in its pathogenesis. Despite the frequent finding of hyperplastic or metaplastic glands, as well as cytologic atypia in some cases, the risk of progression of polypoid endometriosis to a neoplasm that has been previously linked to endometriosis of the usual type appears to be rare. There is often a delay in diagnosis of endometriosis resulting in unnecessary suffering and reduced quality of life. Though a rare entity, it should be considered in the differential diagnosis of the cervical polyp.

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Consent to participate: Written info consent of the patient was obtained before publication
Availability of data and materials: The data (HPE) supporting this study is available through the corresponding author upon reasonable request.
Authors' contributions: Sanjay Singh was the Gynecologist who diagnosed and treated the patient. Syed Asif Hashmi and Yashika Bhatia were the pathologists who did the grossing and histopathological examination of the sample to confirm the diagnosis. All authors contributed to the writing of the paper, and have read and approved the final manuscript.

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