

# Rare Reason for Vaginal Bleeding and Dysmenorrhea in A Young Woman: Endometriosis in A Cervical Polyp

## Genç Bir Kadında Vajinal Kanama ve Dismenorenin Nadir Bir Sebebi: Servikal Polipte Endometriozis

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### Keywords

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### Anahtar Kelimeler

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### Abstract

Abnormal vaginal bleeding in adolescent and young women is not a rare event and can be attributed mainly to anovulatory cycles, pregnancy-related bleeding, and endocrinological disorders in this age group. Cervical polyps commonly occur during the reproductive years, especially after the age of 40. Here we present a rare reason for vaginal bleeding and dysmenorrhea in a 20-year-old woman caused by endometriosis in a cervical polyp. Twenty-year-old patient admitted to Ege University Faculty of Medicine Gynecologic clinic due to vaginal bleeding and prolapsed lesion which was seen from introitus of the vagina. She had mental retardation and seizures since infancy. Her first menstrual bleeding occurred at the age of 14 and she had regular menstrual cycles. Gynecologic speculoscopy and bimanual examination could not be performed because the patient was sexually inactive and she did not accept the bimanual vaginal examination. Magnetic resonance imaging was performed. Multiple cervical polyps and genito-urinary system malformation were reported. Vaginoscopy with hysteroscope was performed and cervical polyp in 5 cm length was detected. Polypectomy was performed with operative hysteroscope without complication. No damage was occurred to hymen. Pathologic result was determined endometriosis in cervical polyp. Cervical polyp in young women is rare and endometriosis in cervical polyp is detected only in a few cases in literature. It is a reason of abnormal vaginal bleeding and dysmenorrhea. Vaginal masses that prolapse from the cervix should be examined precisely. Malignancies of the cervix, vagina and uterus should be kept in mind in patients with malformations and anomalies. We aimed to present this rare case and to show the feasibility of vaginoscopy with operative hysteroscope in sexually inactive patients. Pre-operative evaluations should be patient specific and care should be taken to avoid complications.

### Öz

Adölesanlarda ve genç kadınlarda anormal vajinal kanama nadir olmayan bir durumdur. Bu yaş grubunda en sık sebepler anovulatuvar sikluslar, gebelikle ilişkili kanamalar ve endokrinolojik bozukluklardır. Servikal polipler genellikle reproduktif çağda, özellikle 40 yaş sonrasında saptanmaktadır. Yirmi yaşındaki bir kadında

saptanan vajinal kanamanın ve dismenorenin nadir bir sebebi olan servikal polipte endometrizis olgusunun sunumu amaçlanmıştır. Yirmi yaşında hasta, Ege Üniversitesi Tıp Fakültesi, Jinekoloji Kliniği'ne vajinal kanama ve vajen introitusundan gözlenebilen sarkmış bir lezyon yakınması ile başvurdu. Hastanın doğumda başlayan mental retardasyon ve epilepsisi mevcuttu. İlk menstruasyon kanaması 14 yaşında gerçekleşmiş ve düzenli siklusa sahipti. Hastaya spekulum ve jinekolojik bimanuel muayene hastanın cinsel inaktif olması ve vajinal muayeneyi kabul etmemesi nedeniyle yapılamadı. Hasta manyetik rezonans görüntüleme ile değerlendirildi ve multipl servikal polipler ve genitoüriner sistem malformasyonu saptandı. Histeroskop ile vajinoskopi gerçekleştirildi ve 5 cm uzunluğunda servikal polip saptandı. Operatif histeroskop kullanılarak polipektomi gerçekleştirildi. Komplikasyon ve himende yaralanma gerçekleşmedi. Patolojik inceleme sonucu servikal polipte endometriozis olarak raporlandı. Genç kadınlarda servikal polip nadir olmakla beraber servikal polipte endometriozis literatürde sadece birkaç olgu sunumunda belirtilmiştir. Anormal vajinal kanama ve dismenoreye sebep olur. Serviksten prolabe olan vajinal lezyonlar dikkatlice incelenmelidir. Malformasyon ve anomalisi olan hastalarda serviks, vajina ve uterusun maligniteleri akılda tutulmalıdır. Bu nadir olguyu sunmak ve seksüel olarak inaktif kadınlarda operatif histeroskop kullanılarak vajinoskopinin uygulanabilirliğinin değerlendirilmesi amaçlanmıştır. Pre-operatif değerlendirme her hastaya özgü olmalı ve komplikasyonlardan kaçınmak için dikkatli olunmalıdır.

## Introduction

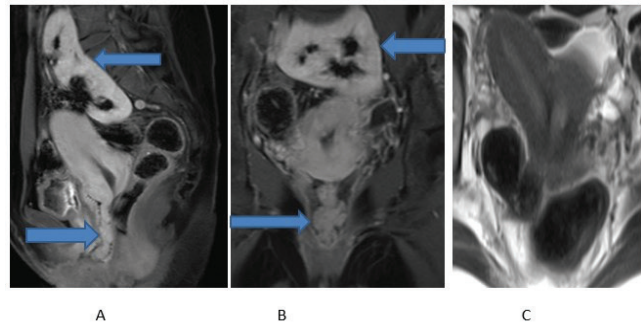
Abnormal uterine bleeding is a common disorder which refers the disturbance of the normal menstrual bleeding range. In adolescent patients, there are several reasons; including anovulatory cycles which are related to immaturity of the hypothalamic-pituitary-ovarian axis, pregnancy related bleeding, thyroid dysfunction, hypothalamic dysfunction, bleeding disorders and hormonal contraception (1). Cervical polyps are the benign growths of the cervix which commonly occur especially after the age of 40 (2). The etiology is unknown. It may cause abnormal vaginal bleeding as post-coital or intermenstrual bleeding. Endometriosis is the existence of the endometrial gland and the stroma outside of the uterine cavity. It is a benign, estrogen dependent, inflammatory disease with an incidence of 5-15 % in reproductive age (3). The lesions are commonly located in the ovaries, peritoneum, uterosacral ligament, cul-de-sac, bladder and bowel (4). Cervix is the rare location of the endometriosis which is usually detected in microscopic evaluation with an incidence of 0.2% (5).

We aimed to represent a case of cervical polypoid endometriosis because it is only detected in a few patients in the literature. She was the youngest in the literature and treated with operative hysteroscope without any complication. Written informed consent was obtained from the patient for publishing the individual medical records.

## Case Report

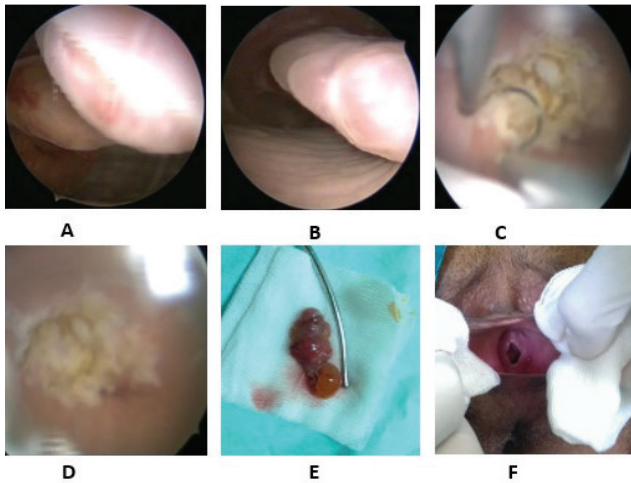
Twenty-year-old patient admitted to gynecology clinic with active vaginal bleeding for 20 days and

prolapsed lesion seen from the introitus of the vagina. Patient has mental retardation and seizures since infancy. Parents of the patient specified that she had vaginal bleeding or spotting for 20 days and sudden episodes of shouting during menstruation period. Recognizing the bloody lesion from the vaginal introitus caused them admit to the hospital. Patient was sexually inactive thus speculum examination and bimanual gynecologic examination were unable to be performed. Vaginal introitus was seen by opening labium majora, minora widely and bloody polypoid lesion that lied through the proximal part of the vagina. Her menstruation started at age of 14 and no hormonal medicine usage was detected in the history. Her mother did not use diethylstilbestrol during her pregnancy. Pelvic magnetic resonance imaging relieved that the patient had pelvic kidney, uterus bicornis and multiple polypoid lesions within the vagina related with the anterior lip of the cervix and reached till the introitus of the vagina (Figure 1). Informed consent was obtained and vaginoscopy

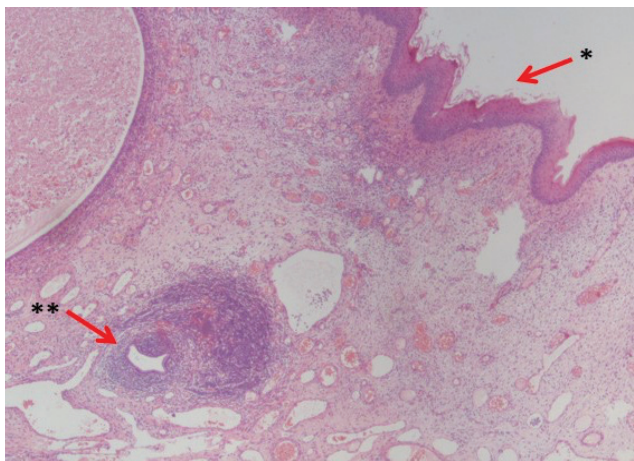


**Figure 1.** A) View of the cervical polyp (inferior arrow) and pelvic kidney (superior arrow). B) View of the cervical polyp (inferior arrow) and pelvic kidney (superior arrow) in coronal section. C) View of the uterus bicornis

evaluation was planned. Five mm hysteroscope was used and revealed that cervical polyp in 5 cm length which was originated from the anterior lip of the cervix. Vagina was filled by glycine and polypectomy was performed with operative hysteroscopy which was 9 mm in diameter by using monopolar electrosurgical device. Lesion was in 5 cm x 3 cm x 1 cm in size, cystic nature and contained brownish/blackish areas (Figure 2). No complication and bleeding was occurred and hymen was determined intact and undamaged (Figure 2). Pathologic evaluation reported that cervical polyp including endometriotic areas with CD10 positive and Ki67 expression was reported as 10% in immunohistochemical evaluation (Figure 3-6).



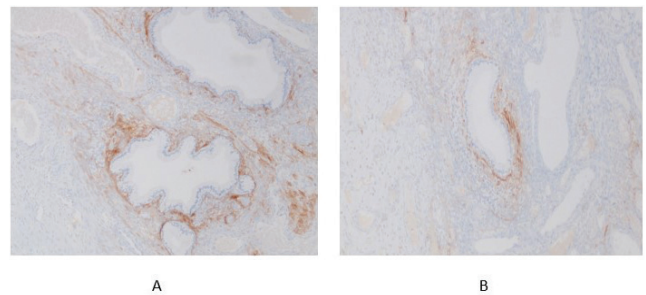
**Figure 2.** A, B) View of the cervix and cervical polyp in vaginoscopy. C, D) post-operative view of the cervix after excision of the polyp. E) macroscopic view of the cervical polyp. F) post-operative view of the hymen



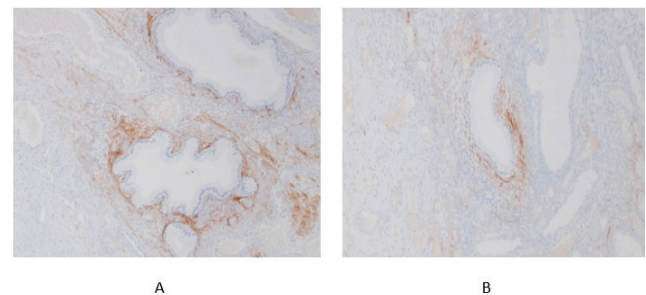
**Figure 3.** \*: Cervical polyp epithelial. \*\*: View of the endometrial stroma and gland in cervical polyp

## Discussion

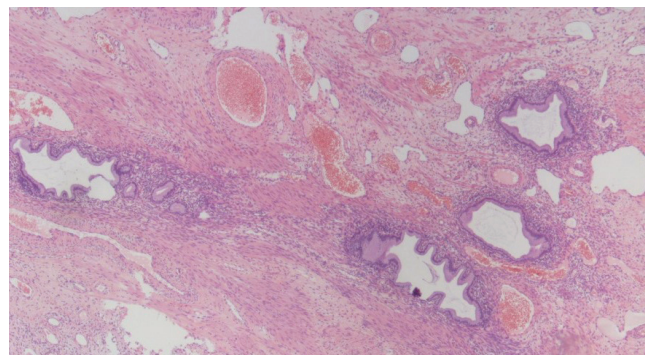
Endocervical polyps are benign and common disease in gynecology. Although etiology is not clear, microscopic clues are thought to be an inflammatory process because of the squamous metaplasia, dilated cervical glands with chronic inflammation cells (2). It may cause vaginal discharge and bleeding owing to the ulceration of the epithelium and secretion from the glands (6). The hallmark of our case is the age of the patient and being sexually inactive. Patient had no property to have chronic inflammatory exposure thus metaplasia or genetic basis could play a role in etiology. She had Mullerian Anomaly and pelvic kidney.



**Figure 4.** Endometriosis focus in polyp



**Figure 6.** CD 10 positive endometrial stroma with immunohistochemical staining



**Figure 5.** Endometrial stroma and glands in polyp



This genetic basis and metaplasia theory can also explain the existence of the endometriosis in cervical polyp. In 1927 Sampson (7) suggested the retrograde menstruation theory to explain the peritoneal and ovarian endometriosis. This is also acceptable as endometrial cells during menstruation can immigrate to cervical polyp in our case to clarify endometriosis existence in cervical polyp. The other theories which are cholemic metaplasia and induction theory which defends hormonal, biological and genetic factors can differentiate the cells to endometrial cells and generate endometriosis (8).

Cervical endometriosis is rare and usually detected retrospectively with pathologic evaluation after excision operations like conization, loop electrosurgical excision procedure or hysterectomy (5). Endometriosis in cervical polyp has reported in only a few case reports in the literature. We have reviewed only six reports in literature. Our patient is the youngest comparing all case reports and only one of these six patients is sexually inactive like our patient (9-14). Endometriosis in cervical polyp causes the symptoms of endometriosis and polyp like; vaginal discharge, vaginal bleeding or spotting, dysmenorrhea, dyspareunia and post-coital bleeding. Diagnosis is easy for polyp which is speculum examination yet pathologic evaluation is obligatory for endometriosis. Huge protruding masses can mimic cervical, endometrial or vaginal malignancies. We could not perform speculum examination because of the virginity of the patient. Abnormal vaginal bleeding should be analyzed precisely. In children and adolescent patients, trauma or child abuse should be primarily excluded. Pregnancy and anovulatory cycles are the most common reasons of the abnormal vaginal bleeding. Ultrasonography or MRI can be performed to visualize cervical polyps. We performed MRI to understand the origin, borders or invasion of the lesion to have an opinion about malignancies. After MRI report revealed multiple lesions we also queried diethylstilbestrol exposure whether these lesions were associated with vaginal adenosis although diethylstilbestrol was withdrawn in early 1980's.

Vaginoscopy with hysteroscope is minimal invasive procedure which provides adequate and perfect view of the vagina. Hysteroscope which is in 5 mm or 9 mm diameter, appeared to be safe and feasible for sexually

inactive patients. Vaginoscopy and hysteroscopy are not only diagnostic but also therapeutic tools for gynecology. It is the fact that informed consent should be taken and possibilities of the complications should be explained. Experienced surgeons and meticulous approach will definitely decrease the complications.

In conclusion; abnormal vaginal bleeding should be examined precisely. Cervical polyp and endometriosis in polyp should be kept in mind in patients with lesions protruding from introitus or filling vagina even in young patients. Excision procedure is obligatory for especially symptomatic patients to exclude any malignancies and treatment can be performed with hysteroscope.

#### **Ethics**

**Informed Consent:** An informed consent was obtained from all patients.

**Peer-review:** Externally peer-reviewed.

#### **Authorship Contributions**

Concept: A.A., Design: A.M.E., Data Collection or Processing: A.A., Analysis or Interpretation: Ö.D.T., Literature Search: D.Ş., Materials: G.E.B., Writing: D.Ş.

**Conflict of Interest:** No conflict of interest was declared by the authors.

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