

Mini-hysteroscopy for a married virgin with a tubular ectocervical giant polyp combined with psychosexual dysfunction: a case report

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Abstract

A 32-year-old virgin presented with psychosexual dysfunction and a mass in the vulva. The mass arose from the cervix with a thin pedicle and it was 6 × 1.5 cm. The mass protruded outside of the hymen, it had a canal inside and an opening at the distal end, and it had a genital-like appearance. A mucosal fold was found in the tubular lumen. Fibrous smooth muscle was observed in the tubal wall, which was covered by squamous and endometrial glandular epithelium on each side. A cervical giant polyp with a canal inside the polyp might be differentially diagnosed from prolapsed genitals and abnormal sexual development. Polypectomy by mini-hysteroscopy was effective for alleviating psychosexual dysfunction caused by the mass in this patient.

Keywords

Hysteroscopy, cervical polyp, psychosexual dysfunction, reproductive development, glandular epithelium, polypectomy

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Introduction

A cervical polyp is a common benign lesion accounting for 4% to 10% of cervical lesions, with the clinical presentation of abnormal vaginal bleeding or malodorous discharge.¹ These polyps are usually solid and smaller than 2 cm, although they vary in size. We describe an unusual case of a patient with psychosexual dysfunction and a giant cervical polyp with an uncommon gross appearance, and it had a genital-like appearance. A mini-hysteroscopy procedure was performed for complete removal of the lesion.

Case report

A 32-year-old woman was admitted to our department with the complaint of a mass in the vulva and intermenstrual bleeding. She had been married for 6 years, but had no history of successful sexual intercourse during the first 3 years because she was afraid of pain. The mass was discovered 3 years previously with a size of 1.5 cm, and it gradually enlarged. The patient was asked to have sexual intercourse at first and then have the mass excised 3 years previously. However, the patient was still a virgin during the second 3 years of marriage because the couple were afraid of this mass.

Menarche of the patient occurred at 11 years old and she had monthly menses lasting 7 days until 7 months previously when she began to have intermenstrual bleeding. Her medical history was otherwise unremarkable.

The woman weighed 79 kg, was 158 cm in height, and had a body mass index of 31 kg/m². A physical examination showed a normal external urethral orifice and clitoris. A nontender tubular neoplasm with a size of 6 × 1.5 cm was found outside the intact hymen, with an opening at the distal end (Figure 1a). A canal that was approximately 5 cm long was found in the

mass, from which white mucus was secreted. A rectal examination did not show any palpable mass, but a normal size of the uterus was detected anterior to the rectum.

Her hemoglobin level was 9.4 g/dL. The levels of estradiol and progesterone in the luteal phase were 138 pg/mL and 13.77 ng/mL, respectively. The prothrombin time, international normalized ratio, and bleeding time were in the normal range. Liver and renal functional tests and thyroid hormone levels were also normal. Ultrasonographic evaluation of the pelvis showed a 4.5- × 1-cm stalk originating from the cervix and protruding into the vagina, with a normal uterine cavity and cervical canal.

We decided to perform a mini-hysteroscopy (4.4 mm in external diameter) to excise the mass, but not damage the hymen. During mini-hysteroscopy, the pedicle of the mass originated from the squamocolumnar junction at the 3 o'clock position of the left lip of the ectocervix, and it had no communication with the endocervix (Figure 1b). A cervical mucosal fold of approximately 0.3 to 0.7 cm in thickness was found inside the canal by mini-hysteroscopy and it had a blind end proximally (Figure 1c). The mass was totally excised after suturing of the pedicle. Deep endocervical and endometrial regions were found to be normal. The patient's postoperative course was uneventful without bleeding or any other complications. She was discharged 1 day after surgery. Five weeks later, she visited again in the outpatient clinic and was doing well. Sexual intercourse was successful for this couple.

Gross evaluation of the mass showed a tubular pinkish mass with a smooth surface and a thin pedicle. Light microscopy showed that fibrous smooth muscle was located in the tubal wall, which was covered with squamous epithelium outside and cervical endometrial glandular epithelium

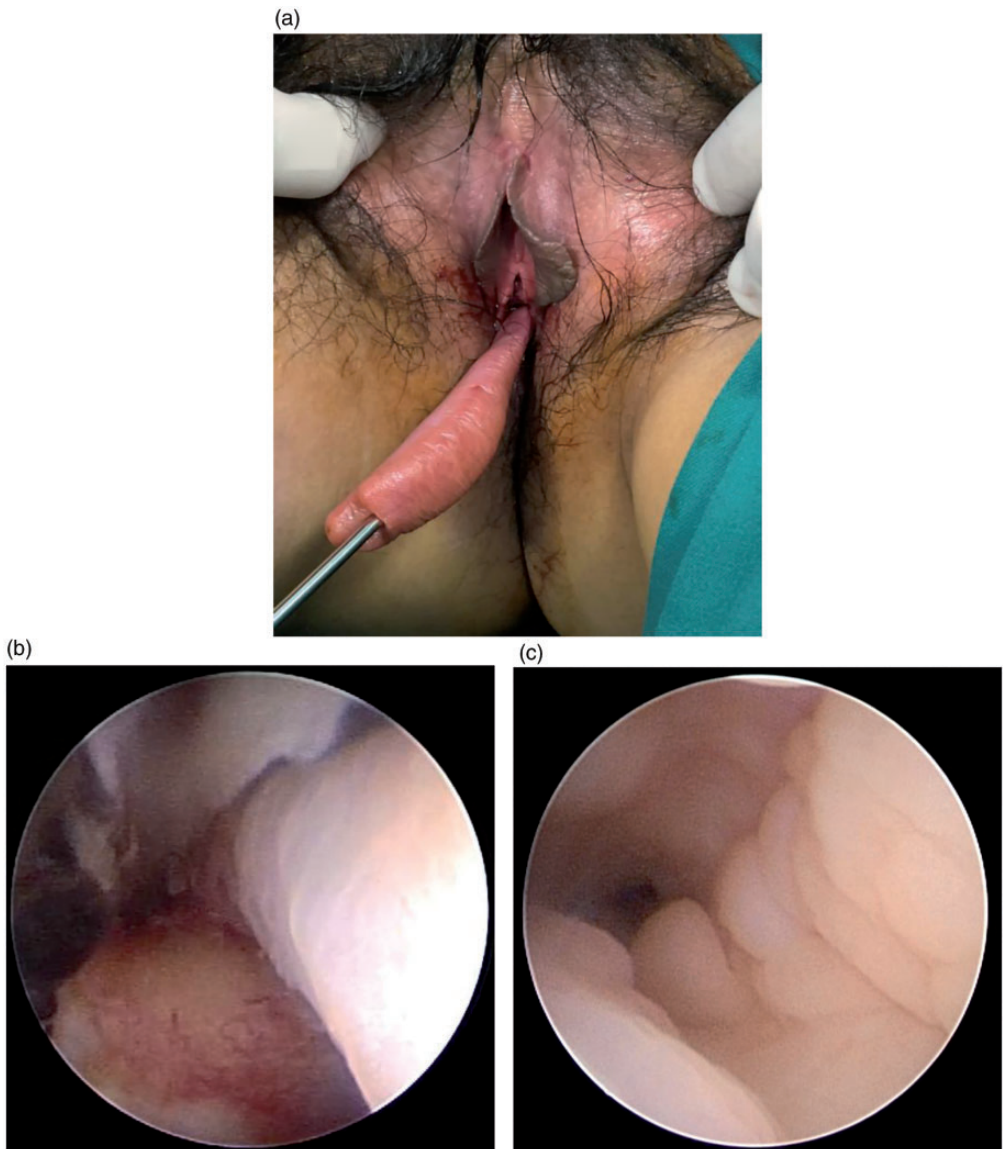


Figure 1. (a) Tubular neoplasm outside of an intact hymen with an opening at the distal end. (b) The pedicle originates from the squamocolumnar junction at the 3 o'clock position of the left lip of the ectocervix. (c) A cervical mucosal fold can be seen inside the canal by mini-hysteroscopy

inside of the wall. Enlarged glands, chronic inflammatory infiltration, and vessel hyperplasia were found under the endometrial glandular epithelium.

Written informed consent was obtained from the patient and her husband for publication of this case report and accompanying images. Institutional review board

approval was not required for publication of this case report.

Discussion

Cervical polyps are among the most common lesions of the cervix and frequently occur in multiparous women.² The stimulus for growth and development of cervical polyps include multiparity, chronic cervicitis, and foreign bodies.³ A giant cervical polyp (larger than 2cm) is another form of polypoid lesion of the cervix, but it has a low incidence. The etiology and pathophysiology of this lesion are still unknown. However, most giant cervical polyps tend to occur more commonly in nulliparous than in multiparous women.^{4,5} Responses to estrogen hormone and to inflammatory mediators are suspected to be the reasons for formation of giant cervical polyps.⁶ Estrogen status, but not cervical inflammation, might have been involved in the growth and development of polyps for our patient with obesity without sexual intercourse. Cervical polyps should also be considered in women without a sexual life when associated with abnormal uterine bleeding.

Major giant cervical polyps commonly present as a large mass in the vagina or protrude outside of the hymen. To the best of our knowledge, we report the first case of a tubular giant cervical polyp, which appeared as immature genitals, such as the cervix or penis. The formation mechanism of the tubular shape is unknown. Different growth speeds of the squamous and glandular epithelium are suspected to be a mechanism of formation.

For patients who present with an unknown tubular mass, this should be differentially diagnosed from a prolapsed uterus and abnormal sexual differentiation and development, such as a double uterus and hydroxylase deficiency. Other differential diagnoses include benign cervical

pathologies, such as cervical myoma, squamous papilloma, and fibroadenoma. However, transformation to a malignant lesion has been reported in 1.7% of polyps, which physicians should be aware of. The association of endometrial carcinoma and cervical polyps was found in 15% of patients, and further evaluation of the endometrium is recommended for women with polyps.⁷

The mini-hysteroscopic procedure, which was performed in our case, resulted in complete resection of the polyp, and enabled further exploration of the deep endocervical and endometrial regions. However, if this novel technique had been applied to our patient 3 years previously, being scared of sexual intercourse because of the vulvar mass would have been avoided during the next 3 years.

In conclusion, a giant cervical polyp is an uncommon variant of classical polyps and it shows distinct clinical and pathological features. We report a case of an unusual tubular cervical polyp with a genital-like appearance that has not been described in the literature to date. Mini-hysteroscopy was able to be applied to resect this polyp without hurting the hymen in our patient.

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Declaration of conflicting interest

The authors declare that there is no conflict of interest.

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