

GIANT ENDOMETRIAL POLYP PROTRUDING FROM THE EXTERNAL CERVICAL OS-A CASE REPORT

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ABSTRACT

Endometrial polyps are localized overgrowth of endometrial glands and stroma through the uterine cavity, that are commonly associated with postmenopausal bleeding, infertility and menorrhagia. Several cases have been described in the literature that usually develops secondary to tamoxifen use or by unbalanced estrogen therapy. The polyps commonly do not extend from the external cervical os, and can mimic endocervical polyp or cervical neoplasia if seen protruding. Although the giant polyps which originate from the uterine cavity and protruding from the cervical os are rare entity, we report the case of a giant endometrial polyp which was protruding from the external cervical os and that developed spontaneously without tamoxifen use in a multiparous 49 year-old woman presenting with heavy vaginal bleeding. Hysteroscopic polypectomy was performed and patient was relieved of her menorrhagia. Diagnosis, management and outcome of this rare entity have been discussed according to the literature.

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INTRODUCTION

Endometrial polyps are localized overgrowths of endometrial tissue composed of variable amount of glands, stroma, and blood vessels covered by epithelium. Endometrial polyps commonly presents as vaginal bleeding in pre- and postmenopausal women [1]. The most common size is less than 2 cm, however, polyps greater than 4 cm are called giant polyps [2]. Endometrial polyps are most frequently seen in multiparous women and their removal is generally performed by hysteroscopic polypectomy [2, 3]. Giant polyps usually occur secondary to high estrogen levels or tamoxifen therapy after breast cancer [4, 5]. Polyps originating from the endocervix are called endocervical polyps [2]. Although giant endometrial polyps, which fill the endometrial cavity, or protruding endocervical polyps with a size greater than 4 cm are published in several cases, endometrial giant polyp rising to the cervix are very rare[5]. In this case report, we describe the case of a giant 9x5x3 cm endometrial polyp originating from the anterior wall of the uterine cavity that extended to the external cervical os and protruded into the vagina. The clinical, radiological, hysteroscopic and histopathologic data of this entity have been discussed according to the literature.

Case Report

A 48-year-old woman, para 4, presented to our hospital with

abnormal vaginal bleeding. The patient described heavy vaginal bleeding during menses alongwith intermenstrual bleeding. On clinical examination, a painless mass was palpated intra vaginally. On vaginal speculum examination, a vascularized, hemorrhagic mass protruding from the external cervical os was seen. Transvaginal sonography revealed endometrial thicknesses of 18 mm, which did not correlate with patient's menstrual cycle. The clinical findings and transvaginal sonographic examination suggested an endometrial or cervical growth or carcinoma. Patient was planned for hysteroscopic guided biopsy.



Fig 1 Hysteroscopic examination showed a mass originating from the anterior wall of uterine cavity that extended to the external cervical os and protruded into the vagina.

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Hysteroscopy was performed with 2.9 mm office hysteroscope (Karl Storz, Tuttingen, Germany). The uterine cavity was distended with normal saline with a pressure of 80 mmHg. On hysteroscopy, in cervical canal polyp was seen. With difficulty uterine cavity was entered. In the uterine cavity, there was hyperplastic endometrium with large polyp of size 9 cm arising from the anterior wall of uterus on right side, extending to the external cervical os. [Fig-1].

Polypectomy was done with the help of scissors and obtained tissue was sent for histopathological evaluation [fig 2].

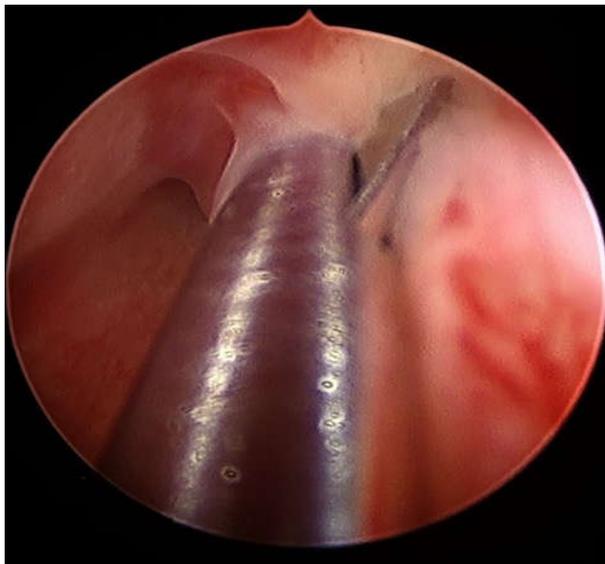


Fig 2 Hysteroscopic view showing polyp being cut with help of scissors.

After removal of the polyp, the uterine cavity was normal. No bleeding was noted from the base of the polyp [fig 3]. The patient was discharged after 6 hours of surgery. The postoperative interval was unremarkable and the patient did not have any complaints on follow up.



Fig 3 Macroscopic appearance of the giant polyp measuring 9x2.5x3 cm

The pathological diagnosis confirmed it to be a giant endometrial polyp with a size of 9 x2.5x 3 cm [Fig-4].

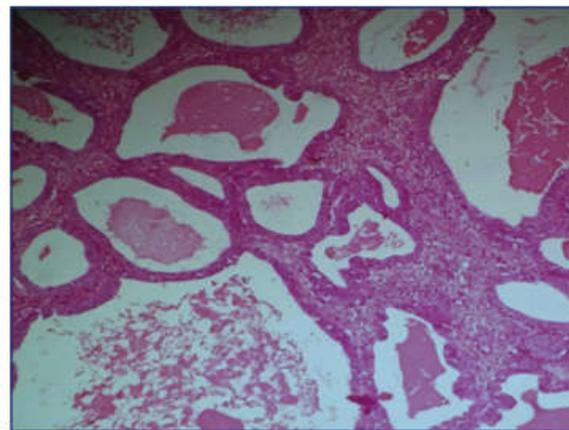


Fig 4 Microscopically, glands of various sizes and irregular shapes are seen with cystic dilatation & epithelium

Microscopic, report showed widely spaced cystic endometrial glands lined by metaplastic ciliated columnar epithelium. The stroma showed interstitial hemorrhage and scattered lymphocytes. No nuclear or cytological atypia were noted. No sign of dysplasia or neoplasia was observed in the glandular or metaplastic epithelium. Patient maintained follow up and was relieved of her menorrhagia in consecutive cycles.

DISCUSSION

Endometrial polyps are localized overgrowths of endometrial tissue composed of variable amount of glands, stroma and blood vessels covered by epithelium. The stroma of the polyp is composed of fibroblast like spindle cells and large blood vessels with thick walls. The polyp epithelium may be active, pseudostratified and after menopause it can be inactive and flat. Depending on response to ovarian hormones, endometrial polyps are divided into three groups viz., mature functioning polyps, immature non functioning polyps and non functioning adenomyomatous polyps [2].

The development of endometrial polyps has been explained by number of molecular mechanisms such as monoclonal endometrial hyperplasia, over-expression of endometrial aromatase and gene mutations. Polyps have characteristic cytogenetic rearrangements similar to uterine leiomyoma. Rearrangements in the High-Mobility Group (HMG) family of transcription factors seem to play a role in pathogenesis [6]. Indraccolo U *et al.*, studied the pathogenesis of endometrial polyps and they demonstrated a causative link: ageing, bcl-2 expression, obesity, tamoxifen regardless of timing and unbalanced oestrogen therapy [7].

Endometrial polyps are most frequently seen in multiparous women in the fifth decade. They are common cause of vaginal bleeding in pre and postmenopausal women, affecting 25% of them [8,9]. They are also associated with infertility. Some may be asymptomatic. In postmenopausal women, polyps usually present with bleeding or discharge accounting for 24.3%.

The most common size of polyp is less than 2 cm, and those greater than 4 cm are called giant polyps. Giant endometrial polyps occur with increased frequency secondary to unbalanced oestrogen levels or tamoxifen exposure after breast cancer [2].

The prevalence of malignancy with endometrial polyps is 1–3% [10]. The risk factors of malignancy within polyps are ageing, obesity, arterial hypertension, postmenopausal period, and tamoxifen.

Hormonal factors may be involved as indicated by endometrial abnormalities in patients treated with tamoxifen. Despite being an oestrogen antagonist, tamoxifen has oestrogen agonistic effects on the endometrium. The partial agonistic activity of tamoxifen in postmenopausal women may produce a hormonal environment of low levels of unopposed oestrogen similar to that in perimenopausal woman. In our patient, the polyp was asymptomatic and developed spontaneously as the patient was not on tamoxifen or other drugs including hormone replacement treatment.

In the literature, most giant polyps protruding from the external cervical os originated from the cervix and are called endocervical polyps. Other giant polyps which originate from the endometrium but are contained within the uterine cavity are called endometrial polys. Interestingly in our case report, the polyp originated in the uterine cavity, extended into the cervix and protruded into the external cervical os.

Non-invasive techniques such as transvaginal ultrasonography, with or without the use of 3D ultrasonography and contrast techniques, are considered as the first line for diagnosis. Transvaginal ultrasonography is a routine, non invasive component of investigation. However, with advent of hysteroscopy it has now become choice for diagnosis as well as treatment at the same sitting. On the sonographic examination, 18 mm thick endometrium was seen in our case which was suspicious of polyp but could not be confirmed. It was on hysteroscopy, that the diagnosis of endometrial polyp was confirmed.

Histopathological examination must be performed on all resected polyps to rule out endometrial polyps (0.5%–3%) with malignant foci [2]. Lasmar BP *et al.*, reported that endometrial polyps larger than 15 mm are associated with hyperplasia [9] and Wang J *et al.*, identified that polyps measuring more than 10 mm are associated with malignancy [11]. For the treatment and histologic diagnosis of endometrial polyps, hysteroscopic resection is the most effective method, while blind biopsy and curettage have low diagnostic accuracy and should not be performed. Table 1 shows various giant polyps reported in literature.

Author	Size (cm)	Origin	Tamoxifen treatment	Cervical protrusion
Nomikos <i>et al.</i> , [4].	8	Uterus	+	-
Moon <i>et al.</i> , [5]	7	Uterus	+	+
Cil <i>et al.</i> , [10]	8	Uterus	-	+
Unal <i>et al.</i> , [12]	10	Uterus	-	+
Aridogan <i>et al.</i> , [13]	14	Cervix	-	+
Branger <i>et al.</i> , [14]	15	Cervix	-	+
Amesse <i>et al.</i> , [15]	5	Cervix	-	+
Present case	9	Uterus	-	-

CONCLUSION

In summary, the origin and pathogenesis of endometrial polyps have not been fully evaluated and understood. Giant endometrial polyps are rare entities and they are associated with tamoxifen and unbalanced oestrogen levels. For diagnostic and therapeutic management, hysteroscopy is the gold standard whereas blind dilation and curettage is not

preferred. Removal for histologic assessment is appropriate in postmenopausal women. In our case report of a giant endometrial polyp originating in anterior uterine wall that protruded through the cervix neither tamoxifen nor HRT was used. Hysteroscopic examination alongwith histopathological evaluation provide the definitive diagnosis.

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