

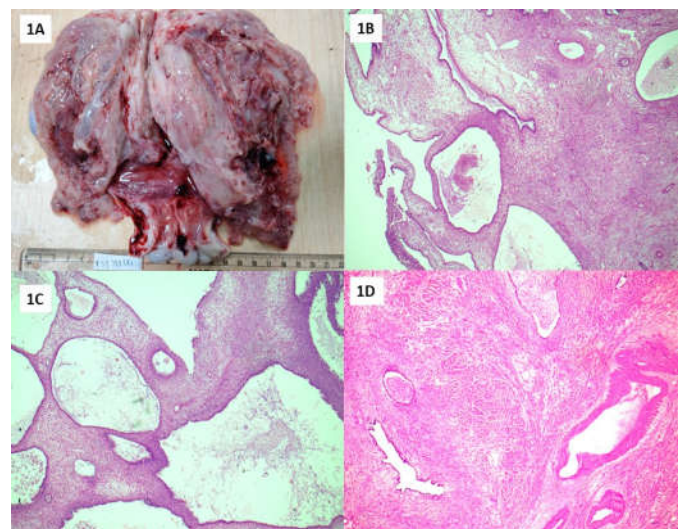
UNUSUAL PRESENTATION OF GIANT ENDOMETRIAL POLYP AND ADENOMYOSIS WITH ACUTE ENDOMETRITIS: IATROGENIC OR DE NOVO?**^{1,*}Dr. Chaudhari S.R., ¹Dr. Meshram, N., ¹Dr. Bhatkule, M., ¹Dr. Gadkari, R. and ²Dr. Yadav, A.**¹Department of Pathology, AIIMS Nagpur, India²Department of Gynecology, AIIMS Nagpur, IndiaReceived 20th December 2022; Accepted 27th January 2023; Published online 28th February 2023**Abstract**

The endometrial polyps can be either benign or malignant. They are usual cause of heavy menstrual bleeding or post-menopausal bleeding. These polyps are composed of varying amounts of endometrial glands and stroma with spindle cells and thick-walled blood vessels. These polyps are the results of unbalanced action of estrogenic or pregestational stimulation. They are usually less than 2 cm in diameter and when size exceeds 4cm, they are called giant endometrial polyp. These are particularly important because clinically may be suspicious for endometrial adenocarcinoma or large polypoid leiomyoma. Thus, they usually cause diagnostic dilemma to clinicians. Whatever may be the aetiology, they are worrisome for patient as they cause more severe symptoms. Here by we report a case of 39 years old female with giant endometrial polyp. Nowadays in addition, there is reduction in the acute endometritis due to better medical care, however we have features of acute endometriosis in adenomyotic foci.

Keywords: Endometrial Polyp, Acute endometritis**INTRODUCTION**

A 39 years old female presented with abnormal uterine bleeding. She was taking mifepristone for one year because of some gynaecological problem, details of which were not known. She had episode of spotting following which she stopped this medication one month back and consulted the Gynaecology outdoor patient (OPD) for the same reason. MRI scan showed large T2 hyperintense lesion in the endometrial cavity measuring 11.4x8.1x6.9cm. The uterus was bulky because of this lesion. The mass showed heterogenous intensity and was predominantly involving fundus and the posterior wall. The junctional zone and myometrium could not be visualized; hence possibility of endometrial neoplasm was considered. The patient was taken for the biopsy which was inconclusive and showed only blood clots. Patient was posted for hysterectomy and frozen section was asked for the definitive diagnosis of the polyp. On opening the uterine cavity, there was hematoma in the lower segment. Hence the endometrial biopsy from this portion showed only blood clots. The rest of the endometrial cavity showed presence of large soft polyp attached to fundus and the posterior wall. On cut section of the myometrium, it showed numerous small cystic spaces. Few of them were filled with purulent material. The cut section of the polyp was soft and showed many varying sized cystic spaces. Four representative sections were taken from polyp and junction of polyp with myometrium for cryostat processing. Sections showed numerous dilated benign endometrial glands and oedematous stroma. Junction showed foci of adenomyosis with few of them showing neutrophils in their lumina. The impression on frozen section was Benign endometrial polyp. Later on, multiple sections from the polyp, junction and surrounding endometrium were taken which showed similar features.

In addition, the myometrium showed extensive adenomyosis with neutrophilic abscesses in their lumina. Cervix showed normal histology with squamocolumnar junction. There was no evidence of granuloma or malignancy in the section studied from the specimen. Patient was advised to follow up for gynaecology consultation. Six months after surgery patient was fine and was cured of her symptoms.



1A: Gross image of cut opened specimen received for frozen section. Lumen is filled with large endometrial polyp which is adherent to wall of uterus in the upper part. Cut surface of the wall showed many pinpoint elevated whitish tiny areas. Cervix appeared unremarkable.

1B: Scanner view image (40x) of the polyp showing simple columnar lining epithelium with underlying edematous endometrial stroma. Many thick walled blood vessels are also seen confirming the polyp.

1C: Scanner view of the interior of polyp showing many dilated glands with edematous endometrial stroma. There is no hyperplasia, atypia or malignancy.

1d: Scanner view of the myometrium showed many foci of adenomyosis reaching up to the outer third of myometrial wall near blood vessels. Many of the adenomyotic glands are dilated and are filled with purulent material composed of neutrophils and fibrinous material.

DISCUSSION

Abnormal uterine bleeding is irregular and excessive bleeding from the uterus. It can occur in pre or postmenopausal women. There are various causes of abnormal uterine bleeding which can be due to ovulatory or anovulatory cycles. The other causes include fibroids, infections or carcinoma. Sudden weight gain or loss also causes hormonal imbalance causing abnormal uterine bleeding (1). When there is unopposed action of estrogens it causes increased risk of endometrial hyperplasia and carcinoma. These patients are usually treated with combination of oral contraceptive pills or progestins (2). The endometrial polyps have varied aetiology and giant polyps can be due to hormonal imbalances. They also can be present when there is no exogenous hormone intake (3,4). Mostly tamoxifen and raloxifene are associated with giant endometrial polyps. This is because of response to excessive circulating estrogens. The mifepristone causing giant endometrial polyp is not studied in details till now. It is potent oral anti-progestational agent. It is synthetic selective progesterone-receptor modulator (SPRM) that is widely used around the globe in the field of reproductive medicine. It is used mainly for the medically induced abortions. Also, for prevention of pregnancy as emergency contraceptive. It is also beneficial for the treatment of leiomyomas and endometriosis. (5,6) Our patient was treated with mifepristone. Further details were not available; however, she gave history of taking this medication for one year. She developed abnormal uterine bleeding. Mifepristone would have caused giant endometrial polyp in this scenario. Mifepristone is generally used as emergency contraceptive. It usually causes diarrhoea, vomiting, weakness or dizziness. (7) Use of this drug is increasing for long term contraception, malignancies with steroid receptor signaling in their pathway. It can be also used for endometriosis and fibroids. Mifepristone is proved to be effective in reducing the size of leiomyoma and uterine blood flow. (8) One of the benefits of mifepristone as an option for medical treatment of fibroids is in its lack of hypo-estrogenic effects, and therefore could be used for more long-term therapy. We think that our patient must have initially small endometrial polyp which must have been mistaken for leiomyoma. Patient was prescribed Mifepristone as a part of medical management of Leiomyoma by some private practitioner Patient took this medication for the long time as she must have relieved of her symptoms. Finally, she had spotting episode after which she came to consult at our institute (6). In this case patient had extensive adenomyosis and the foci of adenomyosis had neutrophilic abscess. This has also led to acute suppurative myometritis. There are few reports in literature of adenomyotic foci being secondarily infected. In the case reports available there is no history of mifepristone, however patients were being treated for adenomyosis. This is an ascending infection from cervicovaginal flora along with decreased local immunity due to local pathology.

In our case the hematoma in lower uterine segment must have facilitated bacterial growth. These infective foci do not respond readily to antibiotics due to low penetrance of drugs and hence treatment is surgical. Patient was advised for follow up. At end of six months she was well relieved of her symptoms. This case depicts importance of thorough and serial radiological investigation with high resolution to detect the origin of lesion and assess the response to medical therapy.

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