



ATYPICAL PRESENTATION OF AN ENDOMETRIAL POLYP IN A POST-MENOPAUSAL FEMALE

Pathology

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ABSTRACT

Endometrial Polyp is a localized, hyperplastic, benign overgrowth of endometrial glands and stroma that protrudes from the endometrial cavity, typically presents as a polypoid mass and usually < 2 cm in greatest dimension. Giant Polyp, exceeding 4 cm, is rare. Maximum size reported till date is 10 cm. A 55 years old female with no history of Tamoxifen intake presented with Intermittent Post-Menopausal Bleeding for last 1 year. Transvaginal Sonography revealed a large, hypoechoic, heterogenous, solid lesion inside endometrial cavity, typical of an Endometrial Neoplastic Growth. Gross Examination of Hysterectomy specimen showed a large, well-circumscribed growth, 13 cm in greatest dimension, attached to uterus, obliterating the entire endometrial cavity, typical of a Submucous Leiomyoma. Sections from growth on microscopy showed cystically dilated glands, surrounded by dense fibroblastic stroma, containing thick-walled blood vessels with no cytologic atypia, diagnostic of a Benign Giant Endometrial Polyp. Although very rare, Endometrial Polyp can exceed 10 cm in size in a post-menopausal female. Diagnosis is confirmed only after Histopathological Examination of resected specimen. Presence of thick-walled blood vessels is a pre-requisite for diagnosis. Endometrial Polyp can have atypical presentations. It can be diagnosed on Histopathology even when Ultrasonography and Gross findings are not suggestive of polyp. Therefore, possibility of Endometrial Polyp should be kept in mind while evaluating a female with postmenopausal bleeding.

KEYWORDS

Endometrial Polyp, glands, stroma, blood vessels.

INTRODUCTION

Endometrial Polyp is a localized, hyperplastic, benign, fleshy, exophytic overgrowth of endometrial glands and stroma around a vascular core that arises from the Stratum Basalis, protrudes from the endometrial cavity and typically forms a polypoid mass with blood vessels running in its centre⁽¹⁾. It can arise anywhere from the uterine cavity but the most common site is the posterior wall near the fundus⁽¹⁾. Typically a polyp is < 2 cm in size whereas a Giant Polyp, exceeding 4 cm in greatest dimension, is rare⁽¹⁾. Maximum size reported till date is 10 cm⁽¹⁾. Risk Factors include Hyperestrogenism, Obesity, Hypertension, Increasing Age, Intake of Tamoxifen, Hormone Replacement Therapy or Phyto-estrogens and Family History of Lynch Syndrome and Cowden Syndrome⁽²⁾. Small Polyp is generally asymptomatic but the most common symptom is Abnormal Uterine Bleeding⁽²⁾, unresponsive to medications. Giant Polyp can present with Post-coital Bleeding, Infertility and Abdominal Cramps. Although mostly benign, the risk of malignant transformation to Endometrial Adenocarcinoma is 3%^{(3) (4)}. Risk Factors for Malignancy include Postmenopausal status, Abnormal Bleeding, Obesity, Hypertension, Giant Polyp and Tamoxifen Therapy^{(3) (4)}. Therefore Hysteroscopic Polypectomy or Total Abdominal Hysterectomy should be performed in all postmenopausal females with endometrial polyp followed by histopathological examination, irrespective of the symptoms⁽⁵⁾.

CASE-REPORT

A 55 years aged G2P2 female presented with Intermittent Post-Menopausal Vaginal Bleeding for 1 year (menopause occurred at 50 years) with no history of intake of Tamoxifen or Hormone Replacement Therapy. Clinical examination revealed a non-tender, bulky uterus. Trans-Vaginal Sonography revealed an irregularly thickened endometrium with a large, 10cm x 8.5cm x 7cm hyperechoic, heterogenous, predominantly solid lesion with internal cystic spaces inside endometrial cavity showing internal vascularity, typical of an Endometrial Neoplastic Growth. Total Abdominal Hysterectomy with Bilateral Salpingo-oophorectomy was performed. Gross Examination of the resected specimen showed a solitary, round, yellow-tan, well circumscribed, large solid growth, 13 cm in greatest dimension with smooth surface, attached to the uterus, obliterating the entire endometrial cavity, typical of Submucous Fibroid

(Leiomyoma). On cut-section of the growth, a white homogenous area was seen (Fig 1). Two sections taken from the growth on microscopy showed polypoid fragments of endometrial tissue lined by epithelium on 3 sides with presence of cystically dilated endometrial glands, lined by a single layer of low columnar to cuboidal epithelium, surrounded by dense fibroblastic stroma, containing numerous thick-walled blood vessels with absence of cytologic atypia and pleomorphism, diagnostic of a Benign Giant Endometrial Polyp (Fig 2 and 3).

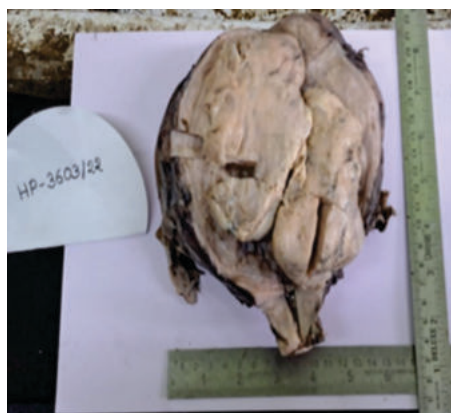


Fig 1:- Gross Examination Of A Huge Growth Attached To Uterus, Obliterating The Endometrial Cavity.

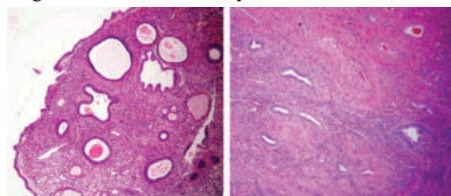


Fig2

Fig3

Fig 2 and 3 :- H & E Stained Section Of Growth Under Low Power (10x Magnification) And High Power (40x Magnification), Showing Cystically Dilated Glands, Fibrous Stroma And Thick-walled Blood Vessels.

DISCUSSION

All endometrial polyps do not have typical presentations. Although very rare, polyp can exceed 10 cm in size, obliterate the entire endometrial cavity in a post-menopausal female in absence of Tamoxifen intake history, abdominal cramps, uterine tenderness and features of malignancy. Trans-Vaginal Ultrasonography is the initial non-invasive modality of choice for the evaluation of an endometrial polyp but the diagnosis is confirmed only after Histo-Pathological Examination of the resected specimen⁽⁶⁾. Presence of thick-walled blood vessels is a pre-requisite for histopathological diagnosis of endometrial polyp⁽²⁾. Absence of prominent spindle-shaped stromal smooth muscle cells with cigar-shaped nuclei and intersecting fascicular growth pattern rules out the diagnosis of Submucous Leiomyoma. Absence of confluent back-to-back papillary arrangement of endometrial glands lacking intervening stroma, lined by tall columnar cells having nucleomegaly, loss of nuclear polarity, prominent nucleoli, cytoplasmic eosinophilia and atypical mitotic figures rules out the diagnosis of Endometrial Carcinoma.

CONCLUSION

Endometrial Polyp is a common cause of abnormal uterine bleeding in females. Transvaginal Sonography, preferably with Colour Doppler, should always be performed to detect polyp⁽⁶⁾. Giant Endometrial Polyp can have atypical presentations, may mimic an Endometrial Carcinoma on Ultrasonography and a Submucous Leiomyoma on Gross Examination and may not present with a polypoidal mass nor have an attached stalk or pedicle. Therefore, a possibility of Endometrial Polyp should always be kept in mind while evaluating a female with post-menopausal vaginal bleeding. Diagnosis of endometrial polyp is confirmed on Histopathological findings of thick-walled blood vessels, cystically dilated endometrial glands and fibroblastic stroma⁽⁷⁾.

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