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Case Report

Ovarian Endometrioid Borderline Adenofibroma Presenting with Post Menopausal Bleeding – A Case Report

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Abstract

Endometrioid borderline tumours (EBTs) of the ovary are uncommon, comprising about 0.2% of all epithelial ovarian tumours. Here we report a case of ovarian endometrioid borderline adenofibroma because of its rarity, emphasising on its challenging histological diagnosis and the significance of uterine curettage to exclude synchronous endometrial adenocarcinoma. A 64-year-old woman presented with post-menopausal bleeding and pan hysterectomy was performed. Uterus showed atrophic endometrium with an adenomyomatous polyp and left ovary showed a nodulocystic mass measuring 7.5 x 5 x 5cm which was diagnosed as a case of endometrioid borderline adenofibroma.

Keywords: Endometrioid borderline tumour, borderline ovarian tumour, endometrial pathologies, Uterine curettage, Adenofibromatous pattern, Intracystic pattern.

INTRODUCTION

Endometrioid borderline tumours (EBTs) of the ovary are tumours of borderline malignancy [1]. These present as a pelvic mass and the mean patient age is 46 - 55 years [2]. EBTs are frequently accompanied by ovarian endometriosis and endometrioid adenofibromas. They are also commonly associated with concomitant endometrial pathologies such as endometrial hyperplasia or synchronous endometrioid endometrial adenocarcinoma especially in young and nulliparous women [3].

Due to similarities in the immunophenotype, these could be confused with metastasis from endocervical, endometrial, or gastrointestinal origins [4]. As most are stage I, surgical staging is not mandatory in most cases. But uterine curettage is required in cases of uterine preservation to rule out synchronous endometrial adenocarcinoma [5]. EBTs have an excellent prognosis with extremely rare recurrences and metastasis [2].

CASE REPORT

A 64-year-old woman presented with post-menopausal bleeding. Endometrial curretings showed an endometrial polyp. Intraoperatively a left adnexal mass was noted and pan hysterectomy was performed. The cut section of endometrial cavity was dilated and filled with a polyp measuring 1.7x1x1cm. A subserous nodule measuring 3x3cm was noted. Left ovary showed a nodulocystic mass measuring 7.5x5x5cm. The cut surface showed multiple cystic spaces with a grey white solid area measuring 5x3.5x3cm (Figure 1).

Microscopically, uterus showed atrophic endometrium with an adenomyomatous polyp and a leiomyoma. Left ovary showed a cystic mass lined by flat to columnar epithelium. Solid area showed crowded tubular glands with focal angular shape in a scanty fibrous stroma. One gland showed papillae. Confluent glands and infiltrative growth pattern were not seen. Negative mucicarmine staining, nuclear positivity for ER and a Ki 67 proliferative index of 15% was noted. The case was diagnosed as Endometrioid borderline adenofibroma, Stage pT1aN0M0.

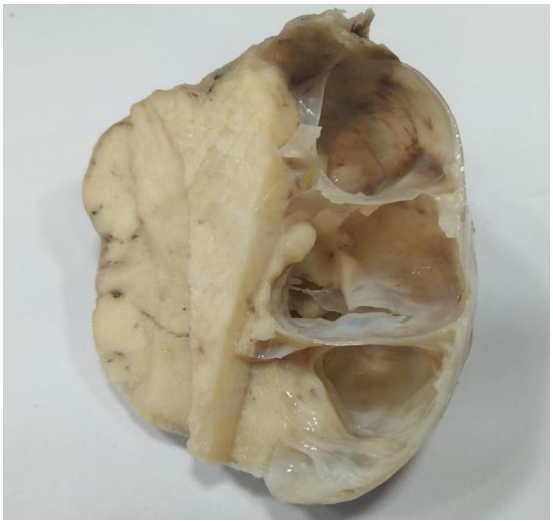

Fig. 1: Cut section showing multiple cystic spaces with a grey white solid area

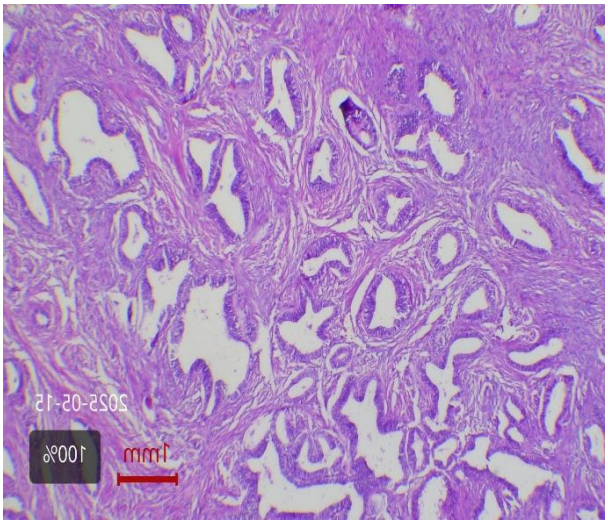

Fig. 2: H &E, 10x. Crowded endometrioid glands in a fibrous stroma

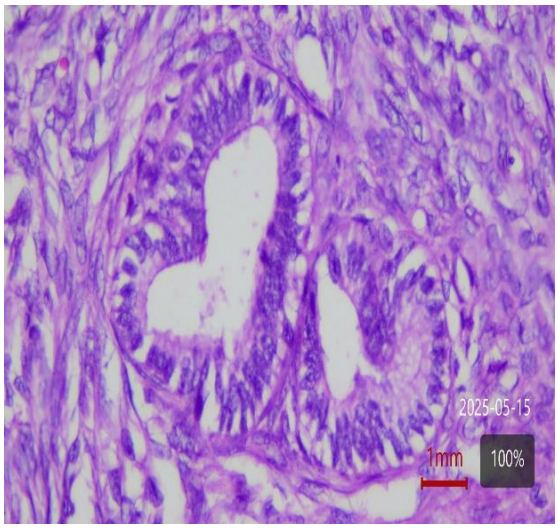

Fig. 3: H &E, 40x. Crowded endometrioid glands in a fibrous stroma

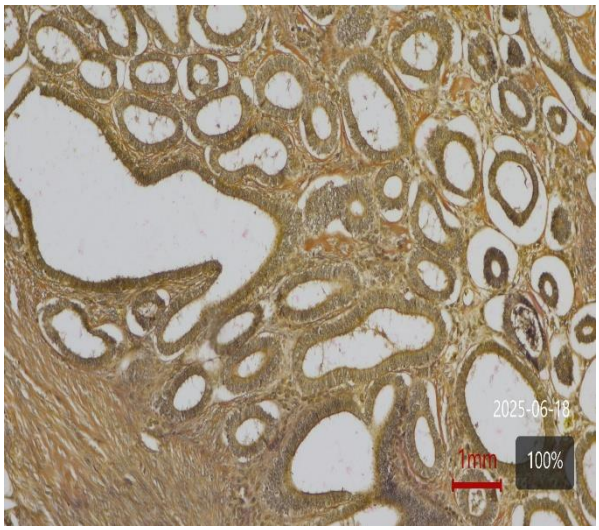

Fig. 4: Mucicarmine, 10x. Negative staining

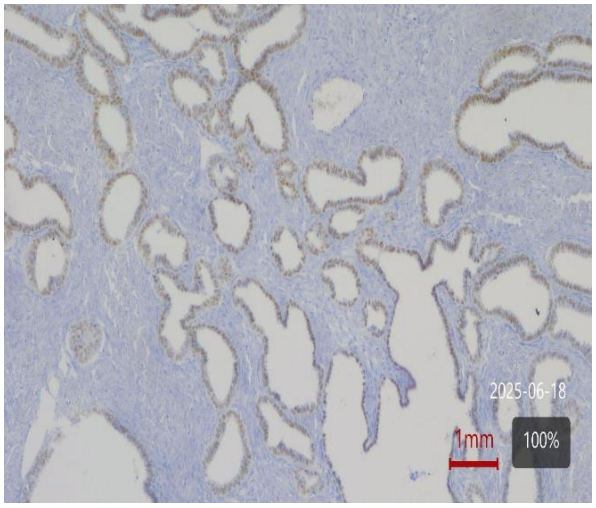

Fig. 5: ER, 10x. Positive nuclear staining

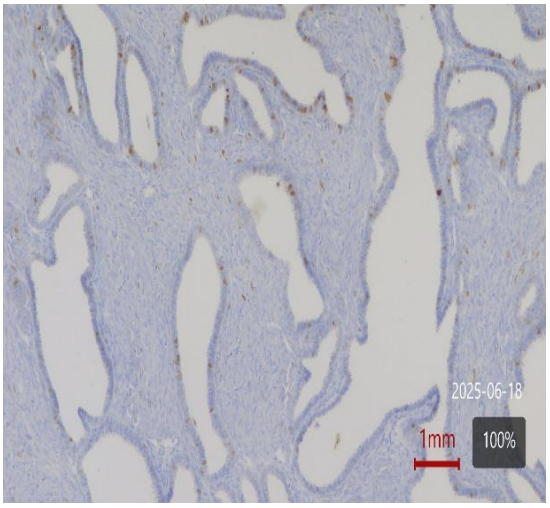

Fig. 6: Ki 67, 10x. Proliferative index of 15%

DISCUSSION

Macroscopically, EBTs are usually large, unilateral with smooth outer surface. Cut section is solid but may be focally or predominantly cystic. The two major histological patterns are adenofibromatous and intracystic patterns, with the former being more common. Adenofibromatous growth pattern commonly shows a component of endometrioid adenofibroma. They are composed of crowded closely packed endometrioid glands of varying sizes with irregular contours arranged in a vaguely lobular architecture surrounded by fibromatous stroma. Mild to moderate cytological atypia may be present. Squamous and mucinous metaplasia [2,6] may occur. A study by Hussain H showed a unilocular cyst with a solid tan nodule of 15mm diagnosed as a case of adenofibromatous pattern of endometrioid borderline tumour as seen with our case [2].

The intracystic pattern shows papillary epithelial proliferation protruding into an endometriotic cyst [4]. Destructive stromal invasion and more than 5mm confluent architecture are features of endometrioid carcinoma [2].

There are no clinically relevant diagnostic molecular tests [6]. These tumours have an excellent prognosis and therefore excessive treatment is best avoided [2].

CONCLUSION

Endometrioid borderline tumours is a rare subtype of borderline ovarian tumour seen associated with endometriosis and endometrial pathologies such as hyperplasia and endometrioid adenocarcinoma. Therefore, uterine curettage is important in cases considering uterine preservation. Macroscopically, these are unilateral solid cystic masses with a smooth outer capsule. Histologically, they are composed of mild to moderately atypical endometrioid glands arranged in either adenofibromatous or intracystic growth patterns. This case was reported for its rarity emphasising on its pathological features.

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