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Case Report

A call for reminder before it's too late “atypical endometrial hyperplasia and concurrent cancer in reproductive age women”

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ABSTRACT

Endometrial hyperplasia is a hyper proliferation of endometrial cells predominantly of stromal glandular components under estrogen influence. This is a premalignant lesion which concomitant with endometrial carcinoma in 40% of cases. Major risk factors are estrogen predominant states such as nulliparity, early menarche, late menopause, obesity, infertility, polycystic ovarian syndromes, estrogen producing tumours. Prolonged use of COCs, tamoxifen also plays a role in endometrial hyperplasia leading to concurrent endometrial carcinoma in reproductive age women. Pointing towards pathology endometrial carcinoma diagnosed at an earlier age are mostly of low grades with lower stage and good clinical outcomes. With this review we emphasize the need of endometrial sampling or fractional curettage in all young women with altered menstrual flow with suspicious of increased endometrial thickening before starting any medications.

Keywords: Endometrial hyperplasia, Endometrial adenocarcinoma, Young women, Risk factors, Management

INTRODUCTION

Endometrial hyperplasia is a premalignant lesion which is stromal glandular hyperproliferation of endometrial cells and chances of these progressing into endometrial carcinoma is 40%.¹ Endometrial carcinomas is a most common disease of post-menopausal women and it is relatively uncommon in women less than 40 years of age.² Majority of patients often have increased exposure to estrogen and less of progesterone which is so called unopposed estrogen. About 75-80% of cases occurs in younger, peri menopausal women in type 1 of endometroid carcinoma.³ Around 10% of cases are reported in the age group less than 40 years of age.⁴ With this knowledge we have a case of atypical endometrial hyperplasia with concurrent carcinoma.

CASE REPORT

Mrs. X, 37 years old para 3 live 2, previous 2 caesarean sections sterilized presented with spotting per vaginum

and irregular cycles with altered menstrual flow for the past 1 month. She had one episode of heavy menstrual bleeding 5-6 months before presenting to OPD. No other significant complaints noted. Her previous menstrual cycles were regular. She has no comorbidities. On general examination she appeared obese with body mass index (BMI) of 27.2 kg/m² with stable vitals. Other systemic examinations along with breast and thyroid examinations were normal. On per abdomen examination Obese abdomen with suprapubic transverse scar noted. On bimanual examination the uterus appeared 14-16 weeks size.

Investigations

Blood examinations with complete hemogram and other blood investigations found out to be normal. Chest X ray showed increased bronchovascular markings. Ultrasound revealed uterus of 9.8×5.1×4.5 cm (Figure 1a) and endometrial thickness of 11 mm (Figure 1b) and cervix

appears ~3 mm and 2.8×2.3 cm hyperechoic lesion with cyst noted in cervix - cervical polyp (Figure 1c).

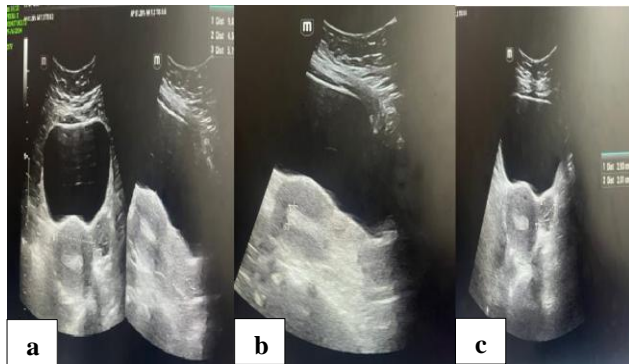


Figure 1: (a) Uterus measurements, (b) endometrial thickness, and (c) cervical polyp.

Patient was planned for fractional curettage with polypectomy. Intra operative findings revealed Uterine cavity length 4 inches and no polyp was visualized. Histopathology is reported as atypical endometrial hyperplasia with cervical biopsy revealing acute on chronic ectocervicitis. Patient and attenders were counselled and proceeded for total abdominal hysterectomy with risk reduction bilateral salpingo oophorectomy. Pre-operative mammogram was also found out to be normal. Intra operatively uterus appeared 14 weeks size with bilateral bulky ovaries and 2×2 cm small clear right ovarian cyst. Peritoneal fluid cytology was also sent.



Figure 2: Uterus with bilateral tubes and ovaries along with cervix.

Gross specimen of uterus with cervix measuring 10×6.5×3.5 cm without any tumor or myometrial invasion (Figure 2). As per CAP protocol of surgical cancer staging it was diagnosed as pT1a (tumor limited to endometrium or invading less than half the myometrium i.e. endometrial atypical hyperplasia with focal superficial myometrial invasion consistent with endometrioid carcinoma, NOS (grade 1) and peritoneal wash revealed negative for malignant cells. Patient is also proceeded with contrast enhanced computed tomography (CECT) which showed no metastasis. This is a case of endometrial carcinoma with

stage IA2. Radiation is not required as it is an early disease and the patient is advised to follow up every six months.

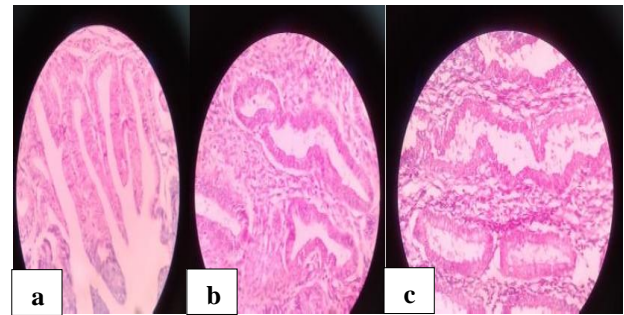


Figure 3: (a) Papillary projections, (b) invasion of endometrial glands into myometrium, and (c) dilated and tortuous glands.

DISCUSSION

Endometrial carcinoma being a disease of post-menopausal age group with mean age of 54 and only 10% of patients has been diagnosed at age less than 40.⁴ In this case the risk of atypical endometrial carcinoma progressing into endometrial carcinoma was 8-29%, was kept in mind and proceeded with total abdominal hysterectomy with risk reducing bilateral salpingo oophorectomy.^{6,7,10}

The pathology behind the disease has been discussed for decades as unopposed estrogen with inappropriate progesterone to counteract, progressing into endometrial carcinoma.⁸ In this case we found out obesity plays a major role in progression of disease at this early age. According to studies, endometrial carcinoma diagnosed at an earlier age has an excellent prognosis with a 5-year survival rate of 85-90%.⁵

CONCLUSION

Endometrial carcinomas diagnosed at an earlier age are pathologically low grade endometrioid carcinoma and of lower grades usually. Outcomes are also favorable in many cases. With this case we would like to emphasize the need of fractional curettage or endometrial samplings in all younger women with altered menstrual flow with suspicious of increased endometrial thickness before starting medications. Proper time management plays a vital role to arrest progression of disease and proper follow up of patient and family members should be emphasized as to be vigilant for early diagnosis.

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