Endometrial Adenocarcinoma in a 27 Year Old Woman: A Rare Case Report

Agrawal Monica1*, Goel Sangeeta2, Srivastava Meenakshi3

1Associate Professor, 3Assistant Professor, Integral Institute of Medical Sciences and Research, Integral University, Dasauli, Bas–Ha ,Kursi Road, Lucknow.

2Associate Professor, Career Institute of Medical Sciences and Research, Near IIM Ghailla, Sahara City Home, Sitapur Hardoi Bypass Road, Lucknow.

ABSTRACT

Endometrial carcinoma is extremely rare in women younger than 30 years. Most woman with endometrial carcinoma are postmenopausal. Endometroid adenocarcinoma is the most common form nearly (80%) of endometrial carcinoma. We report a case of endometrioid carcinoma in a young woman aged 27 years. In early stages diagnosis of such cases using various diagnostic modalities is useful, so as to increase the prognosis and outcome. Endometrial evaluation was consistent with Adenomatous (complex) hyperplasia with atypia Grade 3 Considering her age and fertility status patient was counseled for further management. The authors would like to emphasize that carcinoma endometrium should be kept in mind while evaluating young women with abnormal bleeding and endometrial evaluation should be done before starting any medical treatment.

KEYWORDS: Endometrial adenocarcinoma; young women; prognosis; hysterectomy.

INTRODUCTION

Endometrial carcinoma in women younger than 30 years is rare but well-documented clinicopathologic entity. It is predominantly a disease of postmenopausal woman.[1,2] However in 1-8% it occurs in young women (<30 years old). Specific problems of endometrial cancer at young age include delay in diagnosis, difficulty in pathologic interpretation of the curetting tissues and the motivation of most patients to preserve their fertility. In early stages carcinoma in young are better differentiated, low grade and has good prognosis, hence diagnosis as early as possible is essential.

We report the case of a 27-year-old patient with an endometrial cancer diagnosed at Stage IA grade 1 according to the FIGO (International Federation of Gynecology and Obstetrics) 2000 classification of endometrial cancer.

CASE REPORT

A 27 years old female, P0+3 presented to our outpatient department with complaints of bleeding off and on since 2 months and excessive bleeding since 15 days. Her menarche had been at the age of 12 years and her previous menstrual cycles were short for last 5 years. She was a non smoker and she had not been taking any hormone treatment or oral contraceptives. Her past history revealed that she had been taking ATT for the last 9 months. Neither she nor any other member of her family had diabetes or hypertension. Abdominopelvic examination was normal and since she was bleeding dilatation and curettage was done and endometrial curettings were send for histopathology.

The histopathology was consistent with Adenomatous (complex) hyperplasia with atypia Grade 3. Magnetic Resonance Imaging (MRI) did not demonstrate any extension of tumour beyond the endometrium. We were in dilemma for further management considering her age and fertility status. Patient was counseled regarding the management. Total abdominal hysterectomy and bilateral salpingo oophorectomy was done and specimen was sent for histopathological examination. Postoperatively patient was stable.
Histopathological examination of the operated specimen showed focal areas of well differentiated endometrial carcinoma (endometroid) type associated with extreme atypical endometrial hyperplasia, with no demonstrable myometrial and cervical infiltration. Both ovaries were polycystic.

[Figure 1 & 2]: shows complex irregular glands lined by hyperplastic lining showing marked polymorphism along with mitotic figures. Glands are arranged back to back with scant stroma. These are seen forming papillary in foldings and irregular folding at other places.

[Figure 3]: glands in the deeper (basal) region are dilated with irregular lumen and display ciliated metaplasia with columnar cells displaying fair amount of clear cytoplasm and small cilia in the lumen. There are areas with significant foamy cells packing the stromal spaces between the complex glands and focal areas with the glandular lumen filled with degenerated cells and debris of pyknotic cells. There is dense desmoplastic proliferation in the stroma around the glands in focal area with large part showing preserved cellular stroma with desquamated epithelial cells and inflammatory cells.

[Figure 4]: lining epithelium columnar displaying stratification in large areas with loss of polarity in focal areas. These are associated with small to large islands of squamous morules in between the glands (Adenosquamous variant). Patient was advised for follow up. She remains well with no evidence of recurrence at 12 months following her operation.

**Figure 1: showing gland arranged back to back (arrow) lined by pleomorphic epithelium with mitosis**

![Figure 1](image1)

**Figure 2: showing gland arranged back to back lined by pleomorphic epithelium with mitosis(arrow)**

![Figure 2](image2)

**Figure 3: showing irregular lumen with desquamated epithelial cells and inflammatory cells(arrow)**

![Figure 3](image3)

**Figure 4: showing hyperplastic lining with squamous metaplasia(arrow): Adenosquamous variant**

![Figure 4](image4)
DISCUSSION

Endometrial carcinoma is a disease of older woman, typically arising in the sixth and seventh decades of life. Only 1-8% occurs in less than 30 years. In the present case it was surprising to see endometrial carcinoma in younger age group. This case illustrate that adenocarcinoma of the endometrium can occur in young females despite the fact that the disease mainly affects postmenopausal women. It was presented in our case with abnormal vaginal bleeding which posed diagnostic dilemmas, as at this age dysfunctional bleeding is much more likely.[1,2] Endometrial carcinomas in young are less aggressive and better differentiated than old age.[1,3] In these cases cancer is usually low grade with little, if any, myometrial invasion with a favorable prognosis. Endometrioid sub type, which is categorized as type 1 is more common in young.

Endometrial cancer is an estrogen dependent disease. Chronic exposure to estrogen without accompanying balancing effect of progesterone is considered the major risk for endometrial cancers. Unopposed estrogen condition (premenopausal anovulatory phase like PCOD and functioning ovarian tumors) predisposes to endometrial cancers.[4,5] There is considerable evidence that reproductive factors play a role in etiology of endometrial carcinoma. Nulliparity/Nulligravida is associated with increased risk and there is positive association between infertility and endometrial cancer in young women.[6]

Obesity and hyper estrogenic state are the main risk factors for endometrial cancer in young woman.[7,8] Most studies reported that the majority of patients had a history of anovulation, infertility, ovarian dysfunction, nulliparity and obesity. Younger patients with endometrial carcinoma tend to have a history of estrogen use or hormone-related disorders such ovarian dysfunction, chronic anovulation, infertility, obesity and PCOS.[3] Our patient had no one of these risk factors except PCOS on histopathological examination.

Vaginal bleeding is the most common symptom in case of endometrial carcinoma. Investigations in evaluating endometrial carcinoma include complete blood picture, biochemical, ultrasonography, magnetic resonance imaging, hysteroscopy and endometrial biopsy. In our case, histopathological examination was valuable in giving the diagnosis. Confirmation and staging is done by thorough correlation between radiological and histopathological examination.

The most important prognostic factors of endometrial adenocarcinomas are the histological grade, the cancer stage and the myometrial invasion. This gives rise to the question whether there are specific prognostic factors in young women with endometrial cancer. According to the studies of Evans-Metcalfe et al.[9] and Fahri et al.[10], it seems that the frequency of Grade 1 tumors was higher in young women, reaching 90%. Another study reports a myometrial invasion rate that was more than 50% lower in young women (24% vs. 49% in older women).[3]

Two studies have shown that the association of endometrial adenocarcinoma with ovarian one seems to be more frequent in younger women than older ones (29% vs 6%).[9,11] The optimal therapy in young patients with endometrial cancer still remains controversial. The dilemma arises of whether to recommend medical management or definitive surgery.

Although hysterectomy represents the standard treatment for endometrial cancer, it is often not accepted when the patient is young and desires a pregnancy in the future. In such cases hormonal therapy alone or combined with hysteroscopic ablation are identified as the most used and effective conservative treatments.[12]

CONCLUSION

Endometrial carcinomas though common in menopausal age, it can also occur in young woman hence, detailed investigations are to be done even in young patients to rule out carcinoma. Generally carcinomas in young are less aggressive, better differentiated and has good clinical outcome when detected early. The diagnosis of endometrial cancer in young, premenopausal females may present the patient and the physician with question of conservative management or ovarian preservation. But, it should be kept in mind that every delay in implementing radical treatment can increase the rate of recurrence or the development of metastasis, which will systematically widen the prognosis.

REFERENCES


*Corresponding author: Dr Monica Agrawal
E-Mail: dr.monikagrawal@gmail.com