

Clinicopathological Conference Report

Tumor Clinic Unit 2

Fertility Sparing Management in Carcinoma Endometrium

Tumor Clinic Unit 2

Presenters:

Moderator:

Gyne Unit 2 Faculty:

Cytology & Gyne-Pathology Unit Faculty:

Radiotherapy Unit Faculty:

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Dr Anqua Chowdhary¹ and Dr Geetanjali Gude²

Dr Vanita Jain³

Dr Vanita Jain³, Dr GRV Prasad⁴, Dr Minakshi Rohilla⁵, Dr Shalini Gainer⁶,
Dr Sujata Siwatch⁷

Dr Arvind Rajwanshi⁸, Dr Radhika Srinivasan⁹, Dr Pranab Dey¹⁰, Dr Nalini Gupta¹¹

Dr Sushmita Ghoshal¹², Dr Bhavana Rai¹³, Dr Renu Madan¹⁴

INTRODUCTION

Endometrial carcinoma is the most common gynecological malignancy in the developed nations. More than 90% of cases of endometrial cancer occur in women more than 50 years of age, with a median age at diagnosis of 63 years. The treatment of endometrial carcinoma is total abdominal hysterectomy, bilateral salpingo-oophorectomy with or without lymphadenectomy. However, 3 to 14% of women with endometrial cancer are younger than 40 years, and many of them still wish to retain their fertility.¹ This option is available as majority of endometrial cancers are diagnosed early (80% in stage 1) with 5-year survival rates of over 95%.²

CASE REPORT

A 35-year-old nulliparous female came to the outpatient department with the complaint of primary infertility of 8 years. A transvaginal ultrasound was performed, which revealed an endometrial thickness of 1.73 cm with increased vascularity. She underwent endometrial biopsy as a part of her routine evaluation for infertility on July

23, 2016. The biopsy was reported as well-differentiated endometrioid adenocarcinoma. The patient was unwilling to accept the standard treatment for endometrial carcinoma and was very keen on fertility preservation. The patient was counseled regarding the risks of fertility-preserving treatments, the need for close follow-up, and the chance of failure of such treatment. She decided for progesterone therapy. She was started on medroxyprogesterone acetate (MPA) 80 mg twice a day and decision for higher imaging was taken. Magnetic resonance imaging (MRI) was performed and it reported a well-defined mildly enhancing mass lesion around 3.8 × 2.1 × 3.7 cm arising from the posterior endometrium in lower uterine segment and body region and extending into superior aspect of endocervical canal without obvious invasion of cervical stroma along with asymmetric thinning of junctional zone with no obvious deep myometrial invasion and no pelvic lymphadenopathy. However, superficial myometrial invasion could not be ruled out. Consequently, hysteroscopic dilatation and curettage (D&C) was done to grade the tumor. On hysteroscopy, a 3 × 3 cm growth was seen arising from the left side of lower uterine segment, which was removed and sent for histopathological examination followed by insertion of levonorgestrel-intrauterine device (LNG-IUD). The histopathology revealed secretory epithelium with no evidence of malignancy. Currently this patient is on MPA 80 mg twice a day and a repeat biopsy is planned after 6 months of progestin treatment. The patient will then be referred for assisted reproduction.

DISCUSSION

Endometrial carcinoma is predominantly seen in perimenopausal women. The diagnosis of endometrial carcinoma in young women of childbearing age is rare. Younger and premenopausal women with endometrial carcinoma seem to have a better prognosis than older

^{1,2}Junior Resident, ^{3-6,8-12}Professor, ^{7,13,14}Assistant Professor

^{1,3-7}Department of Obstetrics and Gynaecology, Postgraduate Institute of Medical Education and Research, Chandigarh, India

²Department of Pathology, Postgraduate Institute of Medical Education and Research, Chandigarh, India

⁸⁻¹¹Department of Cytology and Gynaepathology, Postgraduate Institute of Medical Education and Research, Chandigarh, India

¹²⁻¹⁴Department of Radiotherapy, Postgraduate Institute of Medical Education and Research, Chandigarh, India

Corresponding Author: Vanita Jain, Professor, Department of Obstetrics and Gynaecology, Postgraduate Institute of Medical Education and Research, Chandigarh, India, e-mail: drvanitajain@yahoo.com

patients, with increased rates of early-stage and low-grade disease reported.^{3,4}

The standard approach for the management of endometrial cancer, hysterectomy, and bilateral salpingo-oophorectomy is highly effective but results in a permanent loss of reproductive potential. Conservative management of endometrial carcinoma is based on medical treatment with oral progestins. Few papers have addressed the use of LNG-IUD but preliminary data using such treatment seem to demonstrate similar remission and recurrence rates as oral progestins.⁵ The most important issues when considering a conservative management approach are the assessment of pathological characteristics of the tumor and stage of the disease. The criteria for conservative management approach include a histological diagnosis of grade I endometrial carcinoma.⁶ The optimal method to obtain these histologic characteristics is D&C; this procedure is superior to pipelle biopsy in terms of accuracy of the tumor grade.⁷ The initial stage should be confirmed by enhanced pelvic MRI to exclude overt myometrial invasion, as well as adnexal or pelvic node involvement.⁸ Patients should be informed that this is a nonstandard approach and they should be willing to accept close follow-up during and after the treatment. They should also be informed of the need for future hysterectomy in case of failure of the treatment and/or after pregnancies. It has been studied that the impact of progestins on endometrial cancer cells becomes apparent as early as 10 weeks after the start of treatment and hence, the first pathologic response should be evaluated 3 months after the start of treatment and then subsequently every 3 months throughout the progestin treatment until a complete response is achieved. Assessment of response must be performed with a new D&C and imaging.⁹ Response rates associated with the conservative management of endometrial carcinoma are around 75%. Pooled live birth rate among women receiving fertility-preserving treatment for endometrial cancer was 28%, and reached 39% when assisted reproduction technology was used.¹⁰ Thus, for patients achieving a complete response at 6 months, conception must be encouraged and these patients should be referred to a fertility clinic. After completion of childbearing, a complete surgery in

the form of hysterectomy and salpingo-oophorectomy is recommended.

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