Endometrial Cancer Management in Young Women a case report and literature review

Auteurs : Dr H-MEZAACHE , Pr M-LAHMAR
Service de gynécologie obstétrique , CHU de Constantine

INTRODUCTION

Endometrial cancer is the most common gynecological malignancy, with known risk factors including estrogen excess and hereditary syndromes. There is a third population of young women in whom neither factor is identifiable. Hysteroscopy is the standard procedure for obtaining endometrial material for histological evaluation. MRI findings are used to assess the extent of cancer infiltration.

This work deals with a rare case of endometrial cancer from the consultation to the establishment of the diagnosis and radical treatment, with a discussion of current news concerning conservative treatment and the limits of its application to this case. (Only 0.6% of all women with all types of uterine cancer are under the age of 25, according to the South African national registry report between 2010 and 2014 - the African country estimated to have the highest incidence of endometrial cancer).

While hysterectomy with bilateral salpingo-oophorectomy with assessment of the retroperitoneal lymph nodes is standard initial treatment for endometrial cancer, younger women may desire fertility sparing options (1).

OBJECTIVES

- Describe a rare form of endometrial cancer.
- Describe the different therapeutic strategies

CLINICAL OBSERVATION

- A 23-year-old patient, who had her menarche at the age of 13, was unmarried, nulliparous, with no personal or family pathological history, and had never taken oestroprogestogenic pills. She consulted a gynaecological emergency department for metrorrhagia affecting her general condition (haemoglobin level 4 g/dl), and the suprapubic ultrasound revealed a large (3-4 cm) cervical mass. The mass was biopsied under hysteroscopy, with exploration of the uterine cavity. Histological study of the mass by two different pathologists was in favour of a well-differentiated infiltrating endometrial adenocarcinoma of the cervix. Pelvic MRI revealed a corporal-fundiform polypoid formation with invasion of less than 50% of the myometrium, with no locoregional extension, no adenopathy and no signs of peritoneal carcinosis; The gyneco-oncological decision was to perform an enlarged colpohysterectomy with lymphadenectomy (CHEL) with transposition of the ovaries and adjuvant radiotherapy, anatomopathology revealed a grade 1 endometrioid carcinoma of the uterine body with invasion of less than 50% of the myometrium, the cervix parameters were unaffected.

DISCUSSION

- Most endometrial adenocarcinomas occur after menopause. However, 20%–25% of them are diagnosed before the menopause and 2%–14% occur among younger women (less than 40)(3).
- Risk factors for young women to develop endometrial cancer include obesity, smoking, higher insulin levels, type II diabetes, hypertension, and early menarche. A BMI of >30 is typically considered the greatest single individual risk factor for early-onset endometrial cancer. Additionally, it is associated with Lynch syndrome and polycystic ovarian syndrome (2). Our patient was not known to have any of the above risk factors.
- Most cases of endometrial cancer are diagnosed in early stage because of abnormal uterine bleeding as the presenting symptom in 90% of the cases (3). Our patient presented abnormal vaginal bleeding.
- Endometrial carcinoma in young nulliparous women poses a challenge for diagnosis and management, the diagnosis is often delayed and then conservation of the uterus is not feasible, the first step in the diagnostic patients with postmenopausal bleeding or suspected endometrial cancer in non menopausal women is the measurement of endometrial thickness, followed by endometrial sampling, saline infusion sonography can be used to distinguish between focal and diffuse pathology, hysteroscopy should be used as the final step in the diagnostic pathway of women with postmenopausal bleeding. In the young women, the adenocarcinoma is usually a well differentiated, endometrioid type lesion, associated with minimal myometrial invasion, early-stage disease (According to the studies of Evans-Metcalf et al and Fahri et al it seems that the frequency of Grade 1 tumors was higher in young women, reaching 90%) and good prognosis (3).
- Surgery is the classic treatment for endometrial cancer, it consists of total hysterectomy and bilateral salpingo oophorectomy, with a pelvic and aortic lymphadenectomy if required, Curietherapy and radiotherapy are indicated when there is a high risk of recurrence (4). In our patient, the histopathological examination revealed well differentiated an endometrial adenocarcinoma stage IA grade 1 according to the FIGO without myometrial invasion.
- In young women who want to preserve fertility, apart from surgery, conservative management is often implemented after strict selection based on clinical and pathological data. This pharmacological treatment involves the administration of progestogens MPA (medroxyprogesterone acetate) and MA (megestrol acetate). The use of metformin may increase the effectiveness of such treatment. An alternative option is to apply progestogens locally—via the levonorgestrel-releasing intrauterine device. In addition to pharmacological treatment, hysteroscopic resection may be used—part of the uterine muscle adjacent to the pathologically changed endometrium may also undergo resection. An alternative is the administration of estrogen receptor modulators (e.g., SERMs) or aromatase inhibitors, or GnRH agonists(3).
- Our management was radical, with the patient's agreement, given that she has a low socio-economic status and lives in a remote region, which makes monitoring difficult and demanding.
- Follow-up for endometrial cancer involves follow-up cross-sectional imaging including CT, MRI, or PET/CT. Additionally, the tumor marker cancer antigen 125 (CA-125) can be obtained at the time of diagnosis and following treatment to evaluate for recurrence. Typically, this tumor marker is obtained in cases of advanced endometrial cancer at the time of diagnosis, such as cases with lymph node metastasis, extra-uterine disease, or deep myometrial invasion. This tumor marker was not obtained in our case. Approximately 4-20% of patients with endometrial cancer develop regional recurrence, with higher rates of recurrence in patients with locally advanced disease initially and most cases occurring within the first two years after treatment

CONCLUSION

Endometrial cancer is not that rare in women aged less than 40. Hence, we can conclude that a conservative treatment for endometrial carcinoma at Stage IA with a low histological grade is possible if a complete pre-therapeutic assessment is achieved and if a rigorous follow-up during and after the treatment is pursued, achieving a complete response rate of 75%. A recurrence rate of 25% is seen after a temporary response. However, no consensus has been drawn concerning the ideal treatment, its dose or its duration, even though medroxyprogesterone and megestrol acetate are the most used and the best explored. Furthermore, 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 worsen the prognosis. Radical treatment should be indicated as soon as the desire to carry a pregnancy to term is fulfilled.

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