Recurrence of endometrial carcinoma after 6 years of follow-up: A case report of a 60 years old woman with stage 1, grade 1 endometrial carcinoma and review of the literature

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Summary

Endometrial carcinoma is the most common malignancy of the female genital tract.
Most endometrial cancers are diagnosed at stage 1. The definite treatment for endometrial carcinoma consists in total abdominal hysterectomy and bilateral salpingo-oophorectomy with or without lymphadenectomy. The decision of adjuvant treatment depends on risk factors.
A range of protocols for following up women with endometrial cancer exists but the evidence base in endometrial cancer does not provide much support for follow up in terms of improving survival.
We present a case of recurrence of endometrial carcinoma after 6 years of follow up, in a 60 years old woman, with Stage 1, Grade 1 endometrioid carcinoma.

Key words: Recurrence, endometrial cancer Stage 1

Introduction

Endometrial carcinoma is the most common malignancy of the female genital tract, accounting for almost half of all gynecological cancers in the USA. About 39300 new cases are diagnosed annually, resulting in more than 6600 deaths (1).
Attention has been drawn to the fact that deaths from endometrial cancer in the US doubled between 1988 and 1998 (2), probably due to a combination of increased life expectancy and an epidemic of obesity, which predisposes to this disease.
The treatment of endometrial carcinoma is total abdominal hysterectomy and bilateral salpingo-oophorectomy with or without lymphadenectomy. The decision of adjuvant treatment depends on risk factors.
Recognized risk factors include: FIGO stage, histologic grade, depth of myometrial invasion and age. Postoperative radiotherapy plays a major role in the management of stage 1 endometrial cancer but the respective place of external radiotherapy and vaginal brachytherapy remains controversial. Adjuvant external beam radiotherapy reduces locoregional recurrences, but carries a risk of toxicity without overall survival benefits.
We present a case of recurrence of endometrioid carcinoma in a 60 years old woman, after 6 years of follow up, with Stage 1, Grade 1 carcinoma.

Case Report

A 60-years-old woman was admitted to our oncology Department, due to a pelvic mass at the place of the hysterectomy of about 6,5x6cm on a CT-scan, who was operated in our clinic 6 years ago, due to metrorrhagia.

From the D&C and the pathology report of that time, it was revealed that she was suffered from endometrial cancer, that's why she was treated with total abdominal hysterectomy and bilateral salpingo-oophorectomy and bilateral lymphadenectomy in 2002.
The pathology report we obtained after the operation, was describing a tumor of 2x2cm without invasion of the myometrium, the histologic type of which was villoglandular endometrioid carcinoma, grade 1. The adnexa were normal and 28 lymph nodes from both parametria were negative. The cytology of the peritoneal washings was also negative.
The oncology council decided that it was a FIGO Stage 1a, endometrioid carcinoma of the uterus and proposed an intensive follow up, without any adjuvant radiotherapy.
She was followed up by history and physical examination and vaginal cytology every 3-4 months during the first 2 years and every 6 months thereafter. She also performed a chest x-ray, a CT-scan and serum CA 125 measurement every year. She missed the follow-up appointments of the 2007.
On the CT-scan of 2008, a mass of anomiogenic density was found 6,5x6cm in diameter, in the pelvis at the place of the hysterectomy, which was not visible in the previous CT-scan performed 1 year ago. The lesion was in contact with the urinary bladder and the rectal wall, without any sign of invasion.
In our Department she underwent an orthoscopy, a cystoscopy, an IVP, a mammography, a chest x-ray and a vaginal cytology and all of the above were normal. The CA 125 measurement was elevated and the clinical examination revealed a tumor of the pelvis until the right presacral space.
The oncology council decided that the disease should be certified by a biopsy.
An FNA was performed the next day and the cytology report concluded that it was positive for malignancy of adenoid type (recurrence).
The oncology council then decided that the patient should perform a vaginal vault and external pelvic irradiation, because the lesion was not operable.

Discussion

We present this case of recurrent endometrioid carcinoma after 6 years of follow-up in order to point out the significance of long term follow-up.
We decided to follow-up this patient by observation, because patients with grade 1 and 2 lesions without myometrial invasion (stage Ia, grades 1 and 2) have an excellent prognosis and require no postoperative therapy. In a COG study, there were no recurrences and a 100% disease-free 5 year survival rate in the 91 patients in this category, 72 of whom had received no additional treatment after
hysterectomy (3). Other investigators have also reported equal results. The published data suggest that adjuvant radiotherapy is not indicated in the presence of low or intermediate risk stage 1 disease, as demonstrated in a Danish cohort study with a 96% 5 year survival (4) and a Norwegian trial (5). In higher risk women in whom full surgical staging has excluded extrauterine disease, radiotherapy is of uncertain benefit and many would reserve external beam radiotherapy in these women for pelvic recurrence. With regard to vaginal brachytherapy, this is used far less routinely than used to be the case, however it is advisable in the presence of cervical involvement (6).
The follow-up of the 60 years old woman was made by the FIGO recommendations. A range of protocols for following up women with endometrial exists but the evidence base in endometrial cancer does not provide support for follow-up in terms of improving survival. One prospective (7) and several retrospective studies (8-10) have addressed follow-up. Overall, very few recurrences were identified as a direct result of clinic review and neither recurrence free nor overall survival were improved in these cases compared with those detected at clinical presentation. A Canadian study

(10) concluded that the use of routine follow-up Pap smears and chest x-rays was not cost effective. In non-irradiated patients, a regular follow up is mandatory to detect vaginal recurrence at the earliest point, given the high salvage rate following radiotherapy (11).

We know that about one fourth of patients treated for early endometrial cancer develop recurrent disease. More than half of the recurrences develop within 2 years, and about three fourths occur within 3 years of initial treatment. The distribution of recurrences is dependent in large part on the type of primary therapy: surgery alone vs surgery plus local or regional radiotherapy. In a COG study of 390 patients with surgical stage I disease, vaginal and pelvic recurrences were noted to make up to 53% of all recurrences in the group treated with surgery alone, whereas only 30% of recurrences were vaginal or pelvic in the group treated with combined surgery and radiotherapy (3). Therefore, after combined surgery and radiotherapy, 70% have distant metastases. The most common sites of extrapelvic metastases are the lung, abdomen, lymph nodes (aortic, supraclavicular, inguinal), liver, brain and bone.

Localized recurrences are managed preferentially by surgery, irradiation or a combination of the two. Patients with isolated local or regional recurrences after initial surgical treatment of endometrial cancer should be treated with radiotherapy (12-19).

The best local control and subsequent cure are usually achieved by a combination of external-beam radiation therapy followed by a brachytherapy boost. Women with low-volume disease limited to the pelvis have the best outcome. For patients with isolated vaginal recurrence treated with irradiation, reported survival rates range from 24%-45%. For those patients who have pelvic extension of their disease treated with irradiation, lower survival rates from 0%-24% have been reported.

Initial endometrial cancer grade I, younger patient age at recurrence, recurrent tumor size 2 cm or less, time to recurrence more than 1 year, vaginal vs pelvic disease and radiation therapy that included brachytherapy vaginal boost are significant factors in determining control of pelvic disease and survival in patients with locally recurrent endometrial cancer.

Conclusion

The case of this 60-years old woman with recurrent endometrial carcinoma at the place of the hysterectomy 6 years after a total abdominal hysterectomy with bilateral salpingo-oopherectomy and bilateral lymphadenectomy without any adjuvant postoperative therapy, and the review of the literature, point out the importance of long term follow-up, even in cases of stage Ia, Grade I, endometrioid carcinoma of the uterus.

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