Total pelvic exenteration for pelvic recurrence with complex recto-vaginal and vesicovaginal fistula after surgically treated endometrial cancer

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Local recurrences after surgically treated endometrial cancer with associated vesical and rectal fistula represent a particular eventuality in which the only chance for cure is represented by extended pelvic resections. The aim of the current paper is to present the case of a 62 year old patient diagnosed with a local recurrence invading the urinary bladder and the rectum leading to the development of a complex fistula involving both the urinary and digestive tract after surgically treated endometrial cancer. Although initially the patient was not submitted to pelvic radiation therapy, at the time of relapse the presence of this fistula contraindicated any kind of radiation therapy. Therefore the patient was submitted to a total pelvic exenteration with cutaneous ureterostomy and terminal left colostomy. Another particularity of the patient was the fact that she had an ureteral duplication on the right side, both ureters being functional and exteriorized in right ureterostomy. In conclusion, pelvic exenteration might be a good therapeutic alternative for pelvic recurrences with complex fistulas after surgically treated endometrial cancer.

Keywords: pelvic recurrence, complex fistula, ureteral duplication

INTRODUCTION

Endometrial cancer represents one of the most commonly encountered gynecologic malignancies which is usually diagnosed in early stages of the disease due to the fact that most often it causes postmenopausal vaginal bleeding which worries the patient and determines her to self refer to the gynecologist [1,2]. In such cases surgery consisting of total hysterectomy with bilateral adnexectomy and pelvic lymph node dissection remains the first therapeutic option. Meanwhile, this surgical treatment commonly necessitates association of adjuvant therapeutic strategies such as adjuvant therapeutic radiation therapy, hormonal therapy or chemotherapy. In certain cases relapse might occur and, depending on the initial treatment, different therapeutic strategies might be proposed; therefore, in such cases the proposed therapy might range from external radiation to brachytherapy and surgery [3-5]. However, in such cases the management is chosen accordingly to the dimensions of the tumors and to the presence of local complications such as complex digestive and urinary fistulas. Such complications usually contraindicate the
option of radiotherapy and transforms surgery into the only valid option; therefore, due to the presence of local tumoral invasion multiple visceral resections might be imposed.

CASE REPORT

The 62 year old patient with known history of endometrial cancer was initially submitted to surgery two years previously; at that time a total hysterectomy with bilateral adnexectomy and pelvic lymph node dissection was performed, the histopathological studies confirming the presence of a stage II endometroid endometrial adenocarcinoma. However, the patient refused at that moment to be submitted to further adjuvant oncological therapy and did not undergo to the standard oncological follow up plan. Two years later the patient self referred to our hospital for vaginal discharge of urine and stool and was diagnosed with a large pelvic recurrence invading both the urinary bladder and the rectum. Due to the presence of this complex fistula the patient could not be submitted to radiation therapy and therefore she was submitted to surgery. Intraoperatively a large tumor invading the rectum and the urinary bladder was found; meanwhile lateral extension on the left side was identified. A laterally extended total pelvic exenteration was performed, no macroscopic residual tissue being encountered at the end of the surgical procedure. The proximal end of the left colon was exteriorized through left terminal colostomy while the ureters were exteriorized in right cutaneous ostomy. Another particularity of the case consisted of the presence of an ureteral duplication on the right side, the both right ureters exhibiting urinary excretion when sectioned; therefore both of them were exteriorized and stented, transforming therefore the double ureterostomy in a triple ureterostomy (Figures 1-4). The postoperative outcome was favorable, the patient being discharged in the seventh postoperative day. The histopathological studies confirmed the negative resection margins of the specimen and the
patient was further submitted to the systemic oncological treatment.

DISCUSSIONS

Endometrial cancer represents the most commonly encountered gynecologic malignancy diagnosed in women living in developed countries, most cases being found in early stages of the disease [6]. Fortunately most cases are diagnosed in early stages of the disease, when surgery with curative intent followed by radiation therapy represents the most appropriate therapeutic strategy. In such cases the risk of recurrence in the first three years is lower than 15%, being strongly influenced by the initial histopathological type, by the initial stage of the lesion and by the completeness of the adjuvant therapy [7].

However, cases in which the adjuvant oncological treatment is not correctly conducted have a significantly higher risk of developing local and even distant relapse. Local administration of radiation therapy provides a better sterilization of the surface, therefore diminishing the risks of developing pelvic recurrences; meanwhile, cases in which these recurrences develop might be submitted to radiation therapy if initially radiotherapy was not administered or the patient was submitted to low doses of irradiation. In cases presenting large pelvic recurrences radiation therapy is strongly debated due to the fact that the large lesions cannot be destroyed by using only irradiation and due to the fact that local complications such as complex digestive and urinary fistulas might be induced; meanwhile, cases in which such abnormal communications already exist become formal contraindications for radiotherapy [7-9].

In the case that we came to present the patient neglected the initial diagnosis of malignancy and refused to complete the standard therapeutic protocol consisting of the administration of adjuvant radiation therapy; therefore, at the time when the pelvic relapse was diagnosed, the first option of treatment could be irradiation; however, the presence of the digestive and urinary fistulas made impossible the administration of such a treatment, the only possible chance for controlling the local evolution of the disease being represented by surgery. In this respect, a total pelvic exenteration was performed with good outcomes, the histopathology report confirming the presence of negative resection margins.

Another particularity of the case that we came to report is the presence of two functional ureters on the right side, both of them being successfully stented and exteriorized in right cutaneous ureterostomy. Ureteral duplication represents an anatomical particularity which is found in 0.9% of routine autopsies being more frequently encountered in women [10]. It usually remains asymptomatic for a long period of time and might be only incidentally encountered; in other cases it might be associated with vesicoureteral reflux, urinary tract infection or urolithiasis [11]. In the case we presented, the patient had no symptoms related to this anatomical particularity, this finding being an intraoperative surprise.

CONCLUSIONS

Although most often early stage endometrial cancer has an indolent course and an overall good prognostic, in certain cases relapse might occur especially if the standard therapeutic protocol is not entirely respected. In such cases local and even distant metastases might occur; the therapeutic strategy should be tailored accordingly to the anteriorly performed treatment and to the local conditions and particularities of each case.

Conflict of interest: none declared
Financial support: none declared

REFERENCES