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UTERINE CARCINOSARCOMA: REPORT OF A CASE AND REVIEW OF THE LITERATURE

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ABSTRACT

Carcinosarcomas are rare and aggressive tumors of the uterus and carry poor prognosis. It represents less than 5 % of all malignant tumors of the uterine body. It occurs most often in postmenopausal metrorrhagia. Preoperative diagnosis of Carcinosarcomas is essential to optimize surgical treatment. Surgical treatment is the mainstay of treatment for non-metastatic Carcinosarcomas. The prognosis depends on the stage of the tumor surgery, which is often diagnosed at an advanced stage. We report one case of uterine carcinosarcoma through which we specify the epidemiological, pathological, clinical and therapeutic support of Carcinosarcomas.

INTRODUCTION

Carcinosarcoma also called mesodermal mixed tumor or malignant mixed Müllerian tumor is a very rare and extremely aggressive tumor of the uterine body containing the malignant epithelial and malignant mesodermal elements from the same precursor cell.[1] It accounts for 2-4% of all malignant uterine tumors.[2] It is a tumor in postmenopausal women is often discovered following postmenopausal bleeding. This tumor is twice as common in black patients as in white patients.[3-4] They are characterized by a double epithelial and mesenchymal tumor contingent, which can be homologous (Leiomyosarcoma, stromaendometrial sarcoma, or fibrosarcoma) or heterologous (chondrosarcoma, osteosarcoma, rhabdomyosarcoma or liposarcoma).[5] It has a poor prognosis with a five-year survival rate estimated according to studies of 30 to 50%.[6,7,8] The preoperative diagnosis of MMDT which is based on biopsy curettage of the endometrium, biopsy of externalized

lesions and especially endometrial biopsy guided by hysteroscopy, is essential in order to optimize the treatment which is essentially surgical, namely a total hysterectomy with bilateral annexectomy and omentectomy associated with pelvic, iliac and lumbar-aortic lymph node dissection. There is currently no consensus on adjuvant treatment in its management. The main prognostic factor is the International Federation of Obstetrics and Gynecology (FIGO) stage of the tumor.[8,9] There are few studies on uterine CS in particular due to the rarity of this tumor. We report a case of uterine carcinosarcoma, after having explained our observation, we will carry out a review of the literature concerning the other reported cases of carcinosarcomas through which we specify these epidemiological, anatomopathological, clinical, radiological characteristics and its therapeutic management.

OBSERVATION

Patient, 68 years old, nulliparous, nulligeste. Without notable pathological history. she has been in menopause for 16 years. The onset of her symptoms went back to about 3 months before her admission, marked by the occurrence of post-menopausal bleeding of moderate abundance without other associated signs. On general clinical examination, found an overweight patient with a BMI of 24Kg / m2. The gynecological examination finds: on the speculum a bleeding of endo-uterine origin, then on vaginal examination of the uterus increased in size and an aspirated cervix. The inguinal lymph node areas were free, the remainder of the somatic examination was unremarkable. She received a mildly inflammatory cervico-uterine smear with mature squamous metaplasia and parakeratosis. The following examinations were performed as part of her locoregional extension workup: A pelvic ultrasound which showed an increased uterus containing a heterogeneous hypoechoic mass with irregular contours of 12x10 cm (Figure 1). Magnetic resonance imaging which revealed a tumor process in the uterine body of 12 cm long axis without obvious locoregional extension (Figure 2-3). Total hysterectomy with bilateral pelvic adnexectomy and extemporaneous laparotomy was performed under general anesthesia, the result of which was evidence of lesions related to sarcoma. The defenitive pathological examination of the hysterectomy piece found: a friable ulcerative budding tumor occupying the entire uterine cavity and deforming the uterus with necrotico-hemorrhagic areas measuring 12x10 cm. This tumor infiltrated the upper half of the uterine wall. The sections analyzed showed a largely necrotic malignant tumor proliferation with a double epithelial and mesenchymal component, the tumor proliferation infiltrating the myometrium, the isthmus, the uterine horns, the appendages, and the uterine cervix are healthy, with the presence of vascular emboli, the both

the right and left ovaries and parameters as well as the right and left parervixes are healthy. An immunohistochemical complement is in favor of a carcinosarcoma and the definitive diagnosis was that of an endometrial carcinosarcoma, for this the patient was contacted for lymph node dissection but the patient refused the procedure. The file was staffed in RCP (multidisciplinary consultation meeting) and the decision was to do radiotherapy at a total dose of 50 Gy followed by chemotherapy. Radiotherapy was not done because the dosimetric scanner revealed peritoneal carcinoma. The treatment administered was: palliative chemotherapy based on carboplatin and paclitaxel at a rate of 6 courses.

DISCUSSION

Carcinosarcomas (CS) are rare tumors, they represent less than 5% of endometrial cancers according to epidemiological data from the National Cancer Institute.[10] Uterine CS is a tumor in postmenopausal women most often diagnosed after age 60.[4,6,11] Its incidence increases with age.[4] Nevertheless, there are very rare cases of uterine CS in young women. Some studies have found obesity, the use of estrogen therapy and nulliparity as risk factors for uterine CS.[12,13] On the contrary, Jonson et al., Who identified 87 cases of CS did not find obesity and nulliparity as a risk factor.[11] A history of pelvic radiotherapy is also recognized as a risk factor[4,14] as well as the use of tamoxifen in adjuvant treatment of breast cancer.[15,16] Our patient is 63 years old and has been chronically exposed to estrogen due to her morbid obesity. Metrorrhagia is the symptom most often indicative of the diagnosis, which was the case for our patient. sometimes pyometrics and hydrorrhea. CS can also be revealed by pain, pelvic heaviness or an exteriorized tumor mass more rarely.[2] No symptoms are specific.

The preoperative diagnosis of carcinosarcomas is essential in order to optimize surgical treatment. Biopsy curettage of the endometrium, biopsy of externalized lesions and especially endometrial biopsy, preferably guided by hysteroscopy, allow the diagnosis to be made. Magnetic resonance imaging can aid in the diagnosis by showing early enhancing lesions after injection of gadolinium with a contrast enhancement intensity greater than that of the myometrium. The existence of areas of intralesional necrosis is also very specific. Doppler ultrasound cannot guide the diagnosis.[17] The extension workup consists of a thoraco-abdominopelvic tomodensitometric examination (TAP CT). In our context, we reported a diagnostic hysteroscopy and biopsy curettage which we could not perform due to the fact that we found an aspirated cervix preventing access to the cervical os. This prevailed when performing diagnostic surgery based on MRI data with TAP CT not having objectified

secondary locations. As a result, the surgery was not optimal. The final histological analysis, performed on the total hysterectomy sample with bilateral adnexectomy and lymph node dissection, concluded in uterine carcinosarcoma. An immunohistochemical complement was also in favor of a high grade endometrioid carcinoma with a sarcomatoid component.

For non-metastatic uterine carcinosarcoma, treatment is surgical: it must be performed: total hysterectomy with bilateral adnexectomy by laparotomy associated with omentectomy and pelvic and lumbar-aortic dissection, peritoneal cytology and peritoneal biopsies are recommended. It is conventional to say that one should not fragment the uterus during its resection for cancerous endometrial pathology although this has not been clearly demonstrated. Several studies find an ectopic extension in patients a priori at stage I before the surgical staging, in particular at the lymph node and peritoneal level. The rates vary from 31 to 62% depending on the study.[9,18,19] Lumbo-aortic lymphadenectomy is usually only performed if the pelvic dissection is positive. Park et al.[19] recommend performing pelvic and lumbar-aortic lymphadenectomy systematically. They found 50% of positive lumbo-aortic lymph nodes in patients with positive lymph nodes on pelvic dissection and 7% of positive lymph nodes on lumbo-aortic dissection in patients with negative pelvic dissection. Nemani et al.[20] published a series of 1855 cases of stage I to III uterine CS and found an increase in overall lifespan in patients who underwent pelvic lymphadenectomy.

Regarding adjuvant treatments, there is currently no consensus. Some studies show a benefit in terms of overall survival when pelvic radiotherapy is performed.[3,21] while others only find a benefit of radiotherapy on local relapses of the disease[9,22,23] Only one randomized study has been performed comparing surgical treatment alone or in combination with pelvic external radiotherapy. This study[23] listed 91 cases of CS over a period of 13 years. She concluded that pelvic RT decreased the rate of local disease recurrence but had no impact on overall patient survival. It is nevertheless conventional to recommend adjuvant radiotherapy because of the poor prognosis of the disease. Gonzalez Bosquet et al.[24] showed a benefit of adjuvant chemotherapy based on platinum salts on overall survival and a recent study showed a slight superiority of chemotherapy (combining cisplatin, ifosfamide and mesna) to total abdominal radiotherapy in terms of recurrence. and overall survival.[7] However, this difference is not significant. Menczer et al.[6] compared three different groups of patients who first benefited from adjuvant chemotherapy alone (ifosfamide + cisplatin), the second from pelvic radiotherapy alone and the last from chemotherapy followed by chemotherapy. pelvic

irradiation. Its results show a significant decrease in mortality in the sequential treatment group compared to the chemotherapy alone group and a non-significant decrease compared to the radiotherapy alone group. A recent phase II study by the Gynecologic Oncology Group showed the effectiveness of the combination of carboplatin and paclitaxel on CS, but these molecules have yet to be the subject of a randomized phase III study.[25] The major prognostic factor is the surgical stage of the tumor.[8,9] Other prognostic factors such as age, histological grade, homologous or heterologous nature of the tumor, the thickness of myometrial invasion have been studied but they remain controversial. Djordjevic et al.[26] observe a better average survival in the polypoid forms. Uterine CS is most often found at an advanced stage. According to studies, 40 to 60% of CS are diagnosed at stage I or II.[3,4,11] Five-year survival varies between studies from 30 to 50% for all stages.[6,7,8]

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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Consent

Written informed consent was obtained from the patient for publication of this research study. A copy of the written consent of each patient is available for review by the Editor-in-Chief of this journal on request.

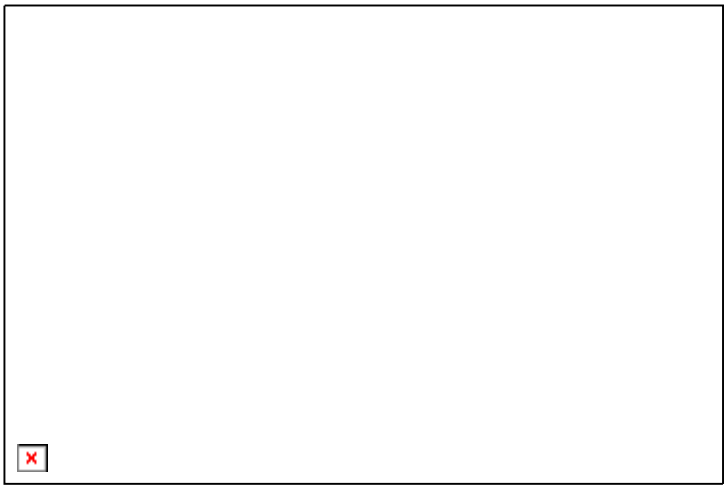
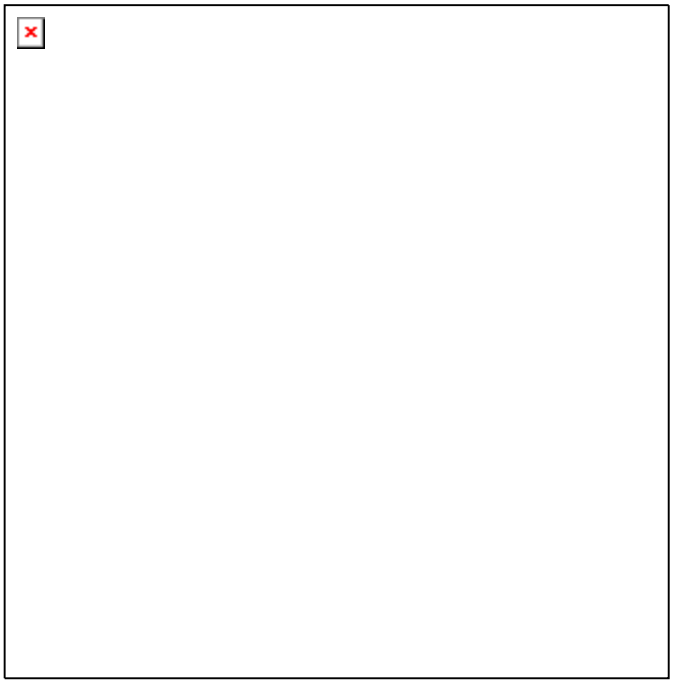


Figure 1: Hypoechoic mass, heterogeneous, with irregular contours of 12x8 cm in favor of a suspicious tumor process, vascularized by color Doppler.



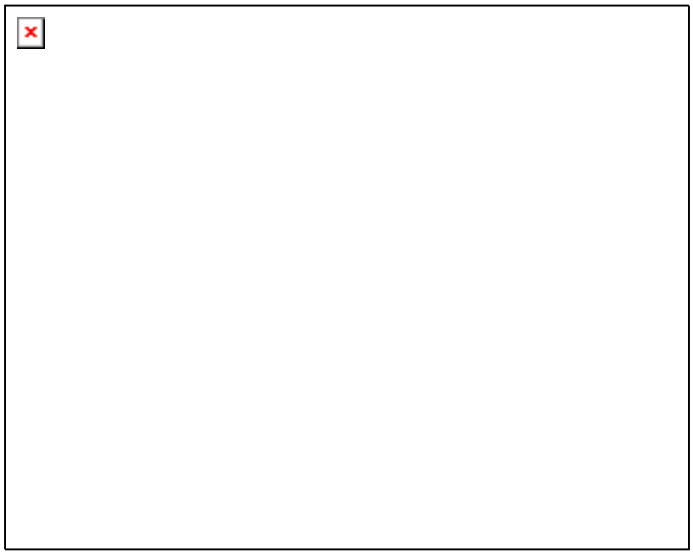


Figure 2-3: a tumor process of the uterine body of 12 cm long axis without obvious locoregional extension, in T1 hypointense, T2 hypersignal, enhanced after injection of gadolinium.

CONCLUSION

Carcinosarcomas of the uterus are rare and aggressive tumors most commonly occurring in postmenopausal women. Preoperative diagnosis is essential. If the extension assessment is negative (TDM TAP). The first-line treatment is surgery. There is no consensus regarding adjuvant treatments. Chemotherapy seems to have demonstrated its effectiveness on this type

of tumor. Radiotherapy will be discussed. The prognosis is bleak because the diagnosis is often at an advanced stage.

BIBLIOGRAPHIE

1. Schorge JO. Uterine sarcoma. In: Schorge JO, Schaffer JI, Halvorson LM, Hoffman BL, Bradshaw KD, Cunningham FG, editors. Williams Gynecology. New York. The McGraw-Hill Companies, 2008.
2. Dorigo O, Annekathryn G. Premalignant & Malignant Disorders of the Uterine Corpus. In: DeCherney AH, Nathan L, Goodwin MT, Laufer N, editors. Current Diagnosis & Treatment Obstetrics & Gynecology, Tenth Edition. New-York. The McGraw-Hill Companies, 2006.
3. Brooks SE, Zhan M, Cote T and al. Surveillance, epidemiology, and end results analysis of 2677 cases of uterine sarcoma1989—1999. Gynecol Oncol, 2004; 93: 204—8.
4. Arrastia CD, Fruchter RG, Clark M and al. Uterine carcinosarcomas: incidence and trendsin management and survival. Gynecol Oncol, 1997; 65: 158—63.
5. Le Bouedec G, Penault-Llorca F, Latour M, Tortochaux J, Dauplat J. Tumeurs mixtes mullériennes de l'endomètre. À propos de quatre cas développés sous tamoxiféne. Gynecol Obstet Fertil, 2003; 31: 733—8.
6. Menczer J, Levy T, Piura B and al. A comparison between different postoperative treatment modalities of uterine carcinosarcoma. Gynecol Oncol, 2005; 97: 166—70.
7. Wolfson AH, Brady MF, Rocereto T and al. A gynecologic oncology group randomized phase III trial of whole abdominal irradiation (WAI) vs. Cisplatin-ifosfamide and mesna (CIM) as post-chirurgical therapy instage I-IV carcinosarcoma (CS) of the uterus. Gynecol Oncol, 2007; 107: 177—85.
8. Nordal RR, Thoresen SO. Uterine sarcomas in Norway1956—1992: incidence, survival and mortality. Eur J Cancer, 1997; 33: 907—11.
9. Sartori E, Bazzurini L, Gaducci A and al. Carcinosarcoma of the uterus: a clinico-pathological multicenter CTF study. Gynecol Oncol, 1997; 67: 70—5.
10. Sherman ME, Devesa SS: Analysis of racial differences in incidence, survival, and mortality for malignant tumors of the uterine corpus. Cancer, 2003 ; 98(1): 176-186.
11. Jonson AL, Bliss RL, Truskinovsky A and al. Clinical features and outcomes of uterine and ovarian carcinosarcoma. Gynecol Oncol, 2006; 100: 561—4.

12. Zelmanowicz A, Hildesheim A, Sherman ME, Sturgeon SR, Kurman RJ, Barrett RJ, et al. Evidence for a common etiology for endometrial carcinomas and malignant mixed mullerian tumors. Gynecol Oncol, 1998; 69: 253—7.
13. Schwartz SM, Weiss NS, Daling JR, Gammon MD, Liff JM, Watt J, et al. Exogenous sex hormone use, correlates of endogenous hormone levels, and the incidence of histologic types of sarcoma of the uterus. Cancer, 1996; 77: 717—24.
14. Pothuri B, Ramondetta L, Eifel P, Deavers MT, Wilton A, Alektiar K, et al. Radiation-associated endometrial cancers are prognostically unfavorable tumors: a clinicopathologic comparison with 527 sporadic endometrial cancers. Gynecol Oncol, 2006; 103: 948—51.
15. McCluggage WG, Abdulkader M, Price JH, Kelehan P, Hamilton S, Beattie J, et al. Uterine carcinosarcomas in patients receiving tamoxifen. A report of 19 cases. Int J Gynecol Cancer, 2000; 10: 280—4.
16. Leung F, Terzibachian JJ, Govyadovskiy A, Bourtembourg A, Maillet R, Riethmuller D. Tamoxifen in the adjuvant setting for breast cancer: reflexions about the risk of uterine carcinosarcoma. Gynecol Obstet Fertil, 2009; 37: 447—51.
17. Taieb S, Narducci F, Chavalier A, Baranzelli MC, Ceugnart L, Leblanc E. Imagerie des sarcomes utérins. Imag Femme, 2008; 18: 229—35.
18. Podczaski ES, Woomert CA, Stevens Jr CW and al. Management of malignant, mixed mesodermal tumors of the uterus. Gynecol Oncol, 1989; 32: 240—4.
19. Park JY, Kim DY, Kim JH and al. The role of pelvic and/or para-aortic lymphadenectomy in surgical management of apparently early carcinosarcoma of uterus. Ann Surg Oncol, 2010; 17: 861—8.
20. Nemani D, Mitra N, Guo M and al. Assessing the effects of lymphadenectomy and radiation therapy in patients with uterine carcinosarcoma: a SEER analysis. Gynecol Oncol, 2008; 111: 82—8.
21. Smith DC, Macdonald OK, Gaffney DK. The impact of adjuvant radiation therapy on survival in women with uterine carcinosarcoma. Radiother Oncol, 2008; 88: 227-32.
22. Callister M, Ramondetta LM, Jhingran A and al. Eifel PJ.Malignant mised mullerian tumors of the uterus: analysis of patterns of failure, prognostic factors, and treatment outcome. IntJ Radiat Oncol Biol Phys, 2004; 58: 786-96.
23. Reed NS, Mangioni C, Malmström H and al. Phase III randomised study to evaluate the role of adjuvant pelvic radiotherapy in the treatment of uterinesarcomas stages I and II: an European Organisation for Researchand Treatment of Cancer Gynaecological Cancer Group Study.Eur J Cancer, 2008; 44: 808—18.

24. Gonzalez Bosquet J, Terstriep SA, Cliby WA and al. The impact of multi-modal therapy on survival for uterine carcinosarcomas. Gynecol Oncol, 2010; 116: 419-23.
25. Powell MA, Filiaci VL, Rose PG and al. Phase II evaluation of paclitaxel and carboplatin in the treatment of carcinosarcoma of the uterus: a Gynecologic Oncology Group study. J Clin Oncol, 2010; 28: 2727-31.
26. Djordjevic B, Gien LT, Covens A, Malpica A, Khalifa MA. Polypoid or non-polypoid? A novel dichotomous approach to uterine carcinosarcoma. Gynecol Oncol, 2009; 115: 32—6.