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UTERINE SAROMAS Retrospective Studies on 7 Cases at the Hassan II University Hospital in Fez

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Abstract **Case Report**

***Introduction*:** Uterine sarcomas are rare tumors, representing less than 3% of malignant tumors of the female genital tract and between 3 and 7% of malignant tumors of the uterine body. They are a heterogeneous group of tumors comprising different histological subtypes, but with a generally identical evolutionary profile. Unlike uterine epithelial tumors, and apart from low-grade endometrial stromal sarcomas, uterine sarcomas have a poor prognosis. They have a high rate of recurrence (between 50 and 70%), local and especially metastatic (in approximately 70% of cases). The objective of our work is to specify the epidemiological characteristics of uterine sarcomas, the diagnostic difficulties faced by practitioners at the clinical, radiological and anatomopathological stages, the modalities of management as well as the different determinants of the prognosis of these rare tumors. ***Patients And Methods*:** Seven cases of uterine sarcomas treated in the gynecology - obstetrics II department at the Hassan II University Hospital in Fez between 2019 and 2023 were analyzed retrospectively. ***Results*:** The average age of our patients varies between 50 and 75 years with an average of 62.2 years. Of the 7 patients, 90% are multiparous, 100% menopausal. 78% of our patients consulted for metrorrhagia. On the paraclinical level, we performed a pelvic ultrasound for all patients, 80% of the results of which were in favor of an enlarged uterus with a heterogeneous echogenic intracavitary image, hysteroscopy in 04 patients for exploration of postmenopausal metrorrhagia and magnetic resonance imaging in 06 patients. The diagnosis was made at the preoperative stage in five patients. 71% of our patients benefited from surgical treatment. The anatomopathological analysis of the surgical specimens showed that 05, 07 patients benefited from adjuvant radiotherapy, while a combined chemotherapy/radiotherapy postoperatively was indicated in 02 patients. One patient presented a recurrence having benefited from palliative chemotherapy, leiomyosarcomas, 01 SSE, and 01 adenosarcoma. ***Conclusion*:** Uterine sarcomas are malignant tumors with a poor prognosis, the diagnosis of which is made essentially a posteriori on the surgical specimen. The pathologist is often confronted with several diagnostic difficulties, hence the interest in advances in immunohistochemistry and cytogenetics. While waiting for new effective therapeutic strategies, early diagnosis in the preoperative or intraoperative period is necessary because patient survival is correlated with the tumor stage at the time of diagnosis.

Keywords: Uterine Sarcoma, Rare Tumor, Poor Prognosis, Diagnostic Challenges, Treatment Modalities.

INTRODUCTION

Uterine sarcomas are rare tumors, representing less than 3% of malignant tumors of the female genital tract and between 3 and 7% of malignant tumors of the uterine body. They are a heterogeneous group of tumors comprising different histological subtypes, but with a generally identical evolutionary profile. Unlike uterine epithelial tumors, and apart from low-grade endometrial stromal sarcomas, uterine sarcomas have a poor prognosis. They have a high rate of recurrence (between 50 and 70%), local and especially metastatic (in approximately 70% of cases). The clinical prognostic factors reported in the literature are, for all sarcomas, stage and age. Some histological prognostic factors have been described for each histological subgroup, but are not consistently found. The diagnosis may be suspected in a particular clinical context (rapid growth of a uterine mass in a postmenopausal patient) or made during histological examination of curettage or hysteroscopic resection (particularly in the context of stromal tumors and carcinosarcomas). The diagnosis may also be suggested intraoperatively, due to the atypical macroscopic appearance of a fibroid. Their diagnosis must be early, because patient survival is correlated with tumor stage [1-3]. Surgery occupies a central place in the management of uterine sarcomas. There are many

publications on adjuvant treatments, but few of them concern prospective trials. The optimal postoperative management is not completely defined. A better knowledge of prognostic factors by studying new series of patients would make it possible to propose adjuvant treatments adapted to the evolutionary profile of each patient. We report in this work, seven cases of uterine sarcomas treated in the department of gynecology and obstetrics II at the Hassan II University Hospital in Fez during the period 2019-2023. The aim of this study is to review our experience on uterine sarcomas, to analyze their clinical and histopathological characteristics, to discuss the diagnostic and therapeutic difficulties associated with them, to evaluate their prognosis and to compare our series with data from the literature.

PATIENT AND OBSERVATION

Observation 1

Patient, aged 70, multiparous without significant pathological history who presented to a gynecology consultation following the discovery of a mass delivered by the cervix evolving for 3 months - the clinical examination objectified the presence of a grayish cauliflower mass exteriorized by the vulva, delivered by the cervix invading the external orifice of the uterine cervix, without involvement of the vagina and the parameters, note the presence of bilateral pelvic ADPs attached to the external iliac artery measured at 2 cm. The pelvic ultrasound showed a thin endometrium, interrupted at the cervico-isthmic level by an echogenic image of 19 x 14 mm in relation to the base of implantation of the cauliflower process delivered by the exocervix and exteriorized at the level of the vulva. On TDM TAP: tissue process delivered by the cervix and exteriorized by the vagina which seems to insert itself at the level of the right posterolateral part of the endocervix, with a pedicle extending over approximately 6.5 and measuring 15 mm thick at the level of its distal part measuring 5x5.5 cm seems to present extensions at the level of the vaginal cul-de-sac. It is attached to the vaginal and vulvar walls, and comes into contact with the urethral meatus, without fatty border of separation, endometrium measured at 5 mm. Biopsy of the process delivered through the cervix returned in favor of sarcomatous-looking spindle cell tumor proliferation with IHC: uterine leomyosarcoma. The patient subsequently benefited from HST + AB + bilateral pelvic lymph node sampling with anapath results in favor of uterine leomyosarcoma. The patient was subsequently discussed in a MDT meeting with the decision to refer her to RTH for RCC + brachytherapy.

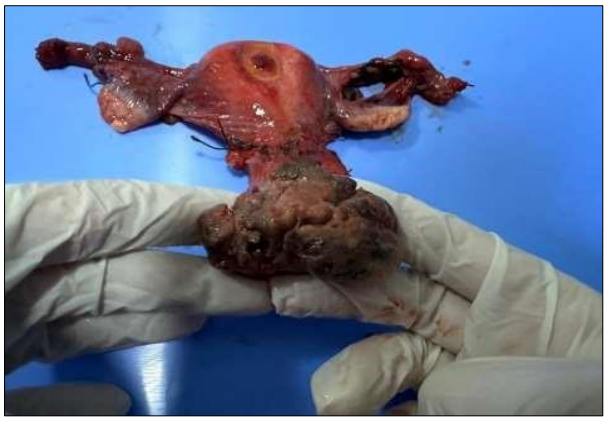


Figure 1: Hysterectomy specimen showing the mass delivered through the cervix

Observation 2

72-year-old patient, without notable pathological history, multiparous, menopausal for 20 years admitted for the management of a postmenopausal metrorrhagia evolving for 2 months in whom gynecological examination objectified the presence of a purplish formation of hard consistency delivered by the cervix of 3 * 3 cm, cervix seems without abnormality visible macroscopically, vaginal wall without abnormality, with on vaginal examination; perception at the level of the cervix of a fleshy formation prolapsed into the vagina with a moreover soft cervix and on rectal examination the parameters free. Biopsy of the delivered mass: Tumor with double benign glandular and atypical mesenchymal component without heterologous contingent whose IHC is compatible with an adenosarcoma with endometrial or endocervical starting point. Pelvic ultrasound found endometrial thickening with heterogeneous fundic hematometry of 2*1 cm, irregular in its post part with weak Doppler flow, cervical canal without particularit. On outpatient hysteroscopy: diffuse cerebroid hypertrophy with atypia, the 02 ostia not seen. on retrograde inspection: formation delivered by the cervix of almost 3 * 4 cm resembling a hypervascularized polyp with an isthmic implantation base b; On abdomino-pelvic MRI: an intra-uterine cavitary lesion delivered by the cervix which bulges in the upper 2/3 of the vagina which is inserted at the anterior corporeofundic level with an attachment zone measured at 02 cm, its pedicle extends along the uterine body of 35 mm in length and a mass which fills the uterine cervix of 47 * 35 mm without signs of invasion of the myometrium and does not seem to invade the cervix and the parameters; Absence of anomalies of the ovaries and the Lombo aortique or pelvic lymphnodes. The chest CT showed: an osteocondensing bone lesion of the external 1/3 of the right clavicle which was cleared by bone scintigraphy. Tumor classified as stage IA according to the FIGO classification of sarcomas: having benefited from Hysterctomy + bilateral lymphadenectomy + multiple biopsy with anapath results in favor of an adenosarcoma; The patient was subsequently discussed in an MTD meeting with the

decision to refer her to Radiotherapy and oncology for adjuvant chemotherapy.

Observation 3

54-year-old patient, multiparous, post-menopausal, with no significant pathological history, initially admitted for management of chronic pelvic pain evolving for 8 months associated with post-menopausal metrorrhagia motivating her consultation having benefited from a pelvic MRI + diagnostic conization, then referred to us for treatment. In whom the clinical examination finds a stable patient, slightly discolored conjunctiva with on gynecological examination: Vaginal examination: hard infiltrated cervix, measuring approximately 7cm, with invasion of the vaginal cul-de-sac, uterus difficult to assess given the pain, on rectal examination involvement of the left proximal parameters. The abdominopelvic MRI showed: cervix with nodular formation measuring 3 cm at the largest, with a heterogeneous signal, including the left posterolateral ones which were massively necrotic with rupture of the cervical stroma in places at this level, creating a mass of 63 x 47 mm. This process of the uterine cervix does not infiltrate the parametrial fat, complete with a thoracic CT scan returning without abnormality; the biopsy was in favor of an atypical leiomyoma, tumor edges, polyploid and fibrous endocervical, whose IHC study concluded a uterine leiomyosarcoma. Diagnostic hysteroscopy with biopsy of the cervix, curettage of the endometrium and endocervix was done with the anapath results showing fusocellular tumor proliferation whose immunohistochemistry profile points towards a leiomyosarcoma. The patient was discussed in an MDT meeting declared inoperable with decision of a radiotherapy + chemotherapy.

Observation 4

75-year-old patient, multiparous, post-menopausal; diabetic hypertensive under treatment, never operated on, treated since 2007 in the oncology department of Rabat for cervical neoplasm having benefited from RCC + brachytherapy (control CT scan not brought by the patient) then referred to us for suspicion of metastatic endometrial tumor in whom the clinical examination: WHO = 0 BMI = 36 with on gynecological examination with specullum and vaginal exam = complete vaginal synechiae, vaginal wall clear. An AP CT: Presence of several budding tissue lesions within the uterine cavity which seem to infiltrate the myometrium and associated with a significant intracavitary retentional fluid initially suggesting a tumor of endometrial origin. A few suspicious bilateral inguinal and right iliac and lumbo-aortic ADPs infra centimeter and centimeter, the study of the thoracic bases reveals two small suspicious lobar and middle right nodules; patient initially discussed in an MDT meeting (in a corona virus pandemic situation) with the decision to perform a thoracic CT scan, inguinal biopsy, urgent pelvic MRI. MRI and abdominal pelvic TDP: Endometrial tumor buds measuring 5.5x4cm invading more than 50% of the myometrium focally at the left lateral isthmic level. Absence of pelvic and lumbo-aortic lymphadenopathy, absence of peritoneal carcinomatosis, absence of abnormalities other organs. The patient underwent a laparotomy with exploration: difficulty secondary to patient obesity , low abundance ascites aspirated for cytology, no carcinomatosis, no deep lymphnodes, shrunken omentum, liver palpated with difficulty appears smooth, non-tumorous stomach, enlarged uterus making resembling a 10 gestation with smooth surface, adnexa without anomalies, fibrotic and friable pelvis, performance of a total hysterectomy + bilateral adnexectomy, with multiple biopsies. On anapath: histological appearance of a Leiomyosarcoma. discussed in an MDT meeting with decision: referred the patient to oncology for chemotherapy.

Observation 5

58-year-old patient, single, post-menopausal, operated for thyroid disease in 2010 (non documented) taking levothyrox. Admitted for managementof pelvic pain discribed as heaviness without other associated signs. Also note the notion of sciatica and functional impotence of the left IM. In whom the clinical examination found: WHO 1 enlarged uterus resembling a 12weeks gestation, (gynecological examination not done: patient says she is a virgin) and on neurological examination difficulty in mobilizing and hyperesthesia of the left IM. Pelvic ultrasound found a polymyomatous uterus, the largest of which (post-corporeal 57/53mm, and anterior isthmic 61/55mm) with regular homogeneous endometrium, the 2 ovaries not seen, completed by MRI showing a large pelvic mass probably of uterine origin of 11cm (subserosal myoma) heterogeneously remodeled with hemorrhagic areas, the atypia areas cannot be eliminated, note a horseshoe kidney. The patient underwent HST + bilateral adnexectomy + multiple biopsies. On exploration: No ascites - enlarged uterus with a subserosal fundic mass measuring 12cm, bumpy with anarchic vascularization and fibrin deposit on its surface - the 02 annexes seen: appear normal, no carcinomatosis, smooth stomach and liver, no palpable lymphnodes. A sample was taken for cytology and multiple biopsies: right and left parieto colic gutter + resection of an epiploic nodule. The Anapath of the HST + bilateral adenexectomy specimen in favor of a largely necrotic undifferentiated malignant tumor process, supplemented by IHC confirming a high-grade leiomyosarcoma; the cervix: low-grade intraepithelial lesions; the other specimens without abnormalities. The patient was subsequently referred to the MDT with the decision to refer her to RTH and oncology for adjuvant chemotherapy.

Observation 6

Patient aged 56, multiparous with a history of: HBP under treatment for 4 years, menopaused admitted to our training center for postmenopausal metrorrhagia, evolving for 3 months associated with pelvic pain. With

on clinical examination an enlarged uterus measuring 13 weeks. Pelvic ultrasound: Enlarged uterus measuring 12X14 cm with regular contours, presence of a heterogeneous hyper echogenic intracavitary image of 12x9 cm, vascularized on Doppler, both ovaries seen appear normal, no intraperitoneal effusion; pelvic MRI finds an invasive endometrial mass of 13x10x12cm associated with myometrial invasion > 50%. Absence of isthmic or cervical involvement, presence of a nodule showing peritoneal carcinomatosis of the left parieto colic gutter of 10 mm; Hysteroscopy objectifies a process of hairy appearance taking up the entire cavity with atypia, completed by a biopsy curettage of the process: in favor of an endometrial stromal sarcoma. The patient subsequently benefited from a hysterectomy + bilateral adnexectomy + multiple biopsy, with at the anapath an endometrial stromal sarcoma, tumoral Epiploon. The patient was subsequently discussed by the MDT with the decision to refer her to oncology for chemotherapy.

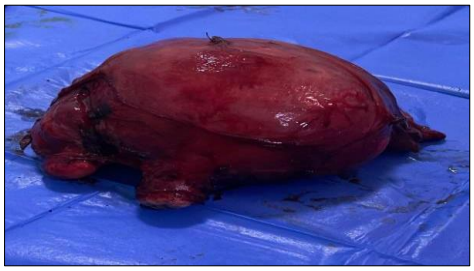


Figure 2: Operative specimen of hysterectomy stromal sarcoma

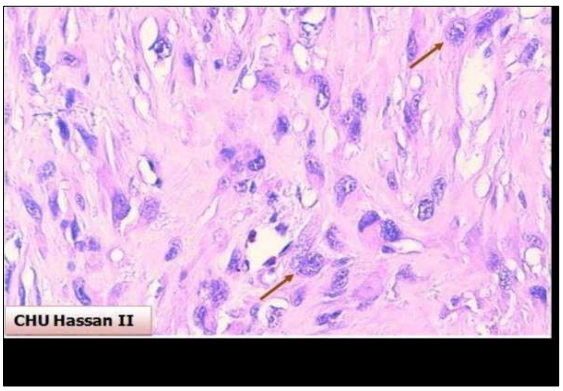


Figure 3: Endometrial stromal sarcoma with atypia

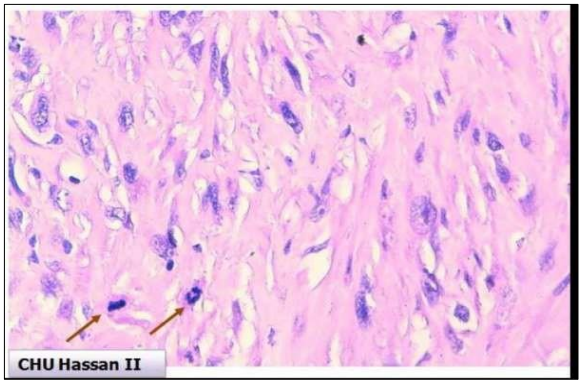
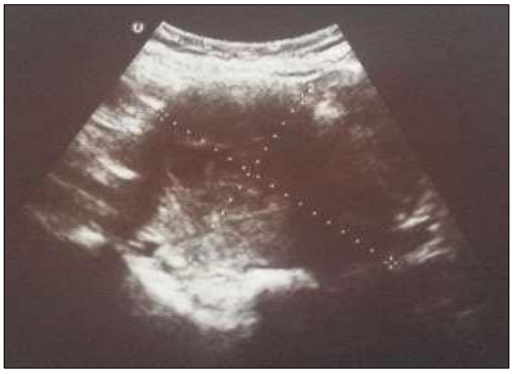


Figure 4: Stromal sarcoma with mitoses

Observation 7

Patient, aged 50, multiparous without significant pathological history who consults for management of Postmenopausal metrorrhagia evolving for 4 months associated with a general condition deterioration in whom the clinical examination objectified an enlarged uterus making 12 weeks. The pelvic ultrasound objectified an enlarged uterus with regular contours of 90x50 mm, presence of an echogenic, heterogeneous, vascularized image on the intracavitary Doppler 27/24mm. On pelvic MRI: large uterus with a corporeal and fundal myometrial tumor process invading the uterine isthmus and accompanied by significant endocavitary hematic fluid retention, with no sign of locoregional invasion with on thoraco-abdominal CT scan: presence of bilateral pulmonary intra-parenchymal nodules and micronodules initially suggesting secondary localizations. Diagnostic hysteroscopy with endometrial biopsy curettage: high-grade LMS. The patient benefited from total abdominal hysterctomy + bilateral adnexectomy + right and left parieto colic gutter biopsies, and of the omentum with exploration; uterus increased in size: seeming of 12 weeks gestation posterior myoma of 4 cm unremarkable annexes. The anapath: high-grade LMS with cellular atypia, several atypical mitotic figures, focus of necrosis remains 0.4 cm from the serosa. The patient was discussed by the MDT with decision to refer her to RTH and oncology for palliative chemotherapy and radiotherapy.



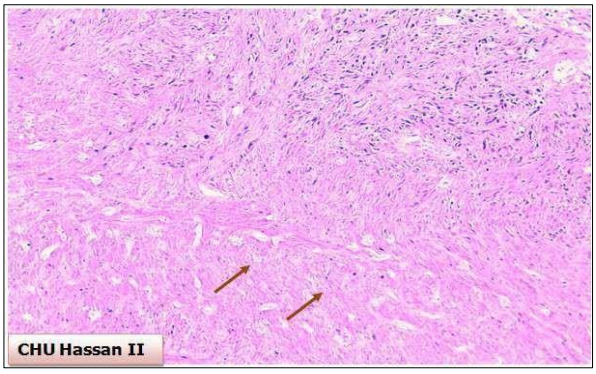


Figure 5: LMS: heterogeneous Doppler image Figure 6: Leiomyosarcoma dissociated by areas of necrosis.

DISCUSSION

Uterine sarcomas are a relatively rare pathological entity. The incidence appears to have increased in recent years. They are no longer considered very rare tumors. This is due on the one hand to a better knowledge of the different anatomopathological aspects of uterine sarcomas, especially with the development of immunohistochemistry, and on the other hand to the increasing exposure to different predisposing factors such as pelvic irradiation and the use of tamoxifen in breast cancer [4].

Epidemiology and Risk Factors

Uterine sarcomas are rare tumors that represent 4 to 9% of malignant tumors of the uterine body [5-7], and 1 to 3% of malignant genital tumors [5]. The annual incidence of uterine sarcomas approaches 2 per 100,000 women [8, 9]. Publications concerning the epidemiology of these tumors are disparate. In a study by S. Brooks, on 2677 cases spread over a period of 10 years in the United States, it is estimated that uterine sarcomas represent 8% of primary malignant uterine tumors [10]. The frequency of each histological type is variously estimated by the authors. In general, leiomyosarcomas are the most common uterine sarcomas. They represent approximately 77% of uterine sarcomas. Endometrial stromal sarcoma is the second tumor type and describes 15% of the total. Mullerian adenosarcoma of the uterus constitutes 8% of sarcomatous tumors of the uterus according to the studies of Clement and Scully [11]. Unclassifiable sarcomas, generally of high grade of malignancy, constitute the remainder [12]. In our study, we collected 07 uterine sarcomas, with 70% LMS, 15% ESS and 15% adenosarcoma. Our results are therefore in agreement with the data in the literature. Uterine sarcoma can develop at any time in life [13, 14]. In our series, the average age at which uterine sarcomas appeared was 62.2 years, which corresponds to the data found in the literature. The average age of onset of leiomyosarcomas in our series was 61.4 years, that of endometrial stromal sarcomas was 56 years, these results are very close to those reported in the literature. Some factors are discussed as risk factors for the occurrence of uterine sarcomas: race, parity, obesity, high blood pressure, menopause, hormonal influence, smoking, history of pelvic irradiation and history of myoma or fibroid. Several authors including Brooks *et al*., [5], Sherman *et al*., [15], have been interested in the racial distribution of sarcomas and report a predominance of these tumors in the black race compared to the white race (risk multiplied by 3) especially concerning leiomyosarcomas. In our series, parity was very variable, 85% of patients were multiparous, and 15% of patients were nulliparous. And according to POTIER the incidence of uterine sarcomas is not influenced by parity [16]. The different series report a predominance of uterine sarcomas in peri- and post-menopause. Leiomyosarcomas and low-grade endometrial stromal sarcomas tend to affect patients in peri-menopause while undifferentiated endometrial stromal sarcomas and adenosarcomas occur mainly in the post-menopausal period [17]. This difference in distribution is superimposed on that of age. In our series, all patients were menopausal at the time of diagnosis, which is consistent with data from the literature.

Diagnosis

The diagnosis of uterine sarcoma is rarely made by clinical or radiological examination. Diagnostic confirmation is often obtained by anatomo-pathological study of the surgical specimen of a myomectomy or hysterectomy. In our series, the average duration of clinical symptomatology was 5 months with extremes ranging from 2 months to 8 months, which is consistent with the data reported in the literature, particularly by the study of Gonzalez Bosquet *et al*., [18], in a series of 93 cases of sarcomas, counted 47% of patients were symptomatic for more than 6 months before the final diagnosis with an average clinical latency period of 8 months. The most common symptomatology was non-menstrual bleeding. They were found in 76% of patients in the Olah series [19], and 73% of patients in the Lennart series [20]. Our results are consistent with the data in the literature because 80% of patients presented with bleeding. The cornerstone of preoperative diagnosis of uterine tumors is endometrial sampling. Three patients underwent this examination, which allowed a preoperative diagnosis to be made. However, blind endometrial biopsy can miss a malignant lesion. Only hysteroscopy with oriented biopsy allows reliable screening. Diagnostic hysteroscopy with biopsy was performed in three patients to explore postmenopausal metrorrhagia, and made the correct histological diagnosis of uterine leiomyosarcoma. Imaging methods such as ultrasound, color Doppler, computed tomography (CT) and magnetic imaging (MRI) can provide some evidence pointing to the sarcomatous nature of a lesion. However, no method can lead to a precise preoperative diagnosis [21]. In our series, the diagnosis of uterine sarcoma was known preoperatively with histological proof in only 5 patients thanks to histological samples (curettage and hysteroscopy with biopsy); in the other cases, the positive diagnosis of sarcoma awaited the histological analysis of the hysterectomy or myomectomy specimen. Nevertheless, the diagnosis of sarcoma was suggested in 37.5% of patients based on data from the clinical examination and the additional assessment. This difficulty in obtaining a correct preoperative diagnosis of sarcomas has been the subject of several studies: In the series of Gonzalez-Bosquet *et al.*, [22], the diagnosis of sarcoma also awaited the histological analysis of the hysterectomy specimen in 52.6% of cases and in that of Nickie-Psikuta [23], grouping together 310 uterine sarcomas in 80% of cases.

Treatment

Therapeutic choices for uterine sarcoma depend on the FIGO 2018 classification. The recommendations have been updated by the French National Cancer Institute (INCa) for cancers of the endometrium, and

have established the therapeutic rules and indications to follow in general in the context of uterine sarcomas, as well as the treatment priority according to the stage of each of our patients. Treatment is essentially based on surgery, pelvic radiotherapy, brachytherapy and chemotherapy Although they have a worse prognosis than soft tissue sarcomas, these tumors have a comparable evolutionary profile and, by extension, the role of adjuvant treatments is often modeled on that of soft tissues. It is necessary to know how to suspect a diagnosis of uterine sarcoma in a premenopausal woman, particularly in the case of a single fibroid in a patient over 40 years of age, if conservative surgery of the uterus is envisaged or a vaginal intervention with a risk of morcellation: an MRI is essential. The diagnosis can be suspected preoperatively by a particular context (rapid growth of a uterine mass in a postmenopausal patient) or proven during a histological sample, the diagnosis can also be suggested intraoperatively, in the face of the atypical macroscopic appearance of a fibroid. But the relevance of extemporaneous examination, particularly in the context of leiomyosarcomas, remains low (sensitivity of 20%) [24]. The recent development of a new FIGO classification specific to each type of uterine sarcoma has allowed an adaptation of surgical methods according to the histological type. The objective is to perform surgical treatment that meets the usual requirements of oncological surgery, with surgery without microscopic tumor residue, without morcellation of the tumor [25, 26]. The surgical approach must allow for the excision of the uterus in one piece and to perform the other necessary excision or biopsy procedures [25]. Laparotomy, particularly midline laparotomy, is the approach of choice, especially in cases of a large uterus [26, 27]. The vaginal approach should be avoided because procedures to reduce the uterine volume to allow its extraction by the vaginal route can potentially increase the risk of peritoneal and/or vaginal dissemination. Morice *et al*., [26], evaluated the prognostic impact of uterine morcellation in a series of 123 patients treated for uterine sarcoma. The rate of pelvic recurrence at three months is increased in patients who had uterine morcellation (8.8% versus 3.6%). Therefore, since the goal of surgical treatment of uterine sarcomas is to perform surgical excision without fragmentation, the vaginal route should be avoided [26]. The intervention begins with an exploration of the entire abdominopelvic cavity in search of loco-regional extension of the tumor (pelvis, peritoneum, pelvic and lumbo-aortic lymph node areas, liver). Any suspicious element will be sampled. Peritoneal cytology will be performed. The basis of surgical treatment of LMS is a simple total hysterectomy (TH). In postmenopausal women, a bilateral adnexectomy (BA) is recommended [28]. The incidence of occult ovarian metastases in women with early stage LMS is between 3.4% and 3.9% [28, 29]. Furthermore, ovarian preservation does not appear to increase the risk of recurrence [30-32]. Giuntoli *et al*., [32], compared survival in two groups of young patients followed for leiomyosarcoma, the first group had undergone HT+AB, the other a simple hysterectomy, survival was the same in both groups. Thus, in a postmenopausal patient, bilateral adnexectomy should be associated with hysterectomy but ovarian conservation can be considered in perimenopausal women except obviously in the case of macroscopic metastases. Consequently, lymphadenectomy is not recommended in the early stages of leiomyosarcoma and should only be considered in the case of macroscopic lymph node involvement or peritoneal extension at the time of surgery. . The low incidence of lymph node metastases in uterine LMS is comparable to that observed in LMS of other soft tissues for which lymphadenectomy is not recommended [28, 29]. Among the five cases in our series of LMS, preoperative diagnosis of LMS was made in three patients. Three of them underwent HST with AB, while one underwent HST with AB and CP. Recommendations regarding the place of adjuvant radiotherapy in the treatment of uterine sarcomas vary and are mainly based on the results of retrospective studies. In our series, the 5 patients with leiomyosarcomas who were followed up received adjuvant radiotherapy (50 grays in 25 sessions) and one of them had a distant recurrence 1 year after the end of irradiation. A single study conducted by Giuntoli *et al*., [33], on 208 leiomyosarcomas describes an improvement in survival with a significant reduction in the risk of local pelvic recurrences in the case of postoperative radiotherapy. Postoperative radiotherapy is not recommended in stage I leiomyosarcomas but can be considered in combination with chemotherapy in more advanced stages. Adjuvant radiotherapy for SSE should be discussed on a case-by-case basis and can only be considered from stage II, always in combination with chemotherapy. In our series, palliative chemotherapy based on doxorubicin was indicated in a patient with distant recurrence, for whom surgical revision was impossible.

CONCLUSION

Uterine sarcomas are rare tumors. Diagnosis is most often postoperative. They represent 0.1 to 0.5% of lesions operated on with a preoperative diagnosis of uterine fibroids. They are characterized by great diversity on the histopathological level and by heterogeneity on the clinical level. And the prognosis remains poor. Ultrasound does not differentiate uterine sarcomas from fibroids. MRI, and in particular dynamic sequences after gadolinium injection, can help with the diagnosis by showing lesions that enhance early after injection, the existence of an area of intra-lesion necrosis is also very specific. Diagnosis must be early because the tumor stage is the major prognostic factor. Surgery remains the main treatment for uterine sarcomas, it must be radical. It allows for the staging assessment, the excision of the uterine tumor and possibly extra-uterine metastases. The indications for the various adjuvant therapies remain highly debated. Current recommendations are in favor of adjuvant radiotherapy, which provides a benefit in terms of local control. For chemotherapy, its interest remains

uncertain. The indications should be discussed on a case-by-case basis depending on the characteristics of the tumor, age, general condition, and wishes of the patient.

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