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Case Report

Uterine Smooth Muscle Tumor of Uncertain Malignant Potential (STUMP): A Case Report

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Abstract

Uterine smooth muscle tumor of uncertain malignant potential (STUMP) is rare and complex tumor. The incidence of STUMPs is not well known. They represent 1/3 of uterine sarcomas and 1.3% of uterine cancers. They are classified as benign leiomyoma and malignant leiomyosarcoma. The average age is 45 years. Most are premenopausal. No clinical or radiological specificity. The diagnosis of STUMP is confirmed after myomectomy or hysterectomy according to three histological criteria mentioned above. There is no established consensus regarding the management of this pathology. Little limited information in the literature for STUMP. Ultrasound discrimination of a leiomyoma or a leiomyosarcoma is not definitely possible. Surgery is the mainstay of treatment. Regular monitoring detects recurrences and treats them early. We report the case of a patient operated for a uterine mass whose anatomopathological study revealed a STUMP.

Keywords: *Uterine Smooth Muscle Tumor; STUMP*

Abbreviations

STUMP: Uterine Smooth Muscle Tumor of Uncertain Malignant Potential

Introduction

Uterine smooth muscle tumors are classified as benign leiomyoma and malignant leiomyosarcoma regarding presence of tumor cell necrosis, cytological atypia and mitotic activity.

Uterine smooth muscle tumor of uncertain malignant potential (STUMP) is rare tumor and regarded as sub-classification in uterine smooth muscle tumors between benign and malignant criteria [1].

STUMPs present a complexity due to their histological diagnosis, of their uncertain evolution towards malignancy revealed by metastases, but also of their treatment [2].

We report the case of a patient operated for a uterine mass whose anatomopathological study revealed a STUMP. Through this case we tried to study the diagnostic, therapeutic and prognostic means.

Case Report

Mrs. A.L 44 years old, with no notable pathological history, married and nulligeste, in a period of genital activity, consulting for menometrorrhagia with a feeling of pelvic heaviness dating back 1 year without other associated urinary or digestive signs. The clinical examination on admission found a patient conscious, normal tense, normal heart rate, eupneic. The abdominal examination finds an abdominal pelvic mass reaching midway to the umbilicus. The pelvic examination revealed an enlarged uterus, the rest of the examination was without abnormalities. The patient underwent a pelvic ultrasound objectifying a retro-uterine tissue mass filling the Douglas pouch of 9.5 cm associated with sub-serous fundic and corporeal fibroids of 5 and 5.5 cm (Figure 1). The assessment was completed by a pelvic scanner showing a globular uterus with multiple fibrous nodules under serous, interstitial and isthmic, the largest of which measures 82 x 78 mm (Figure 2). The biological assessment as well as the cervico-uterine smear were normal. The patient was selected for polymyomectomy, in the exploration, a mass was found in retro uterine adhering to the Douglas, hypervascularized and bleeding on contact with a sarcomatous appearance, we realized an excision of the mass but an hemostatic hysterectomy was indicated for hemodynamic instability with omentum biopsy and removal of peritoneal lavage fluid. In the anatomopathological study, the retro uterine mass corresponded to a STUMP, the hysterectomy and the omentum biopsy were free from any tumor proliferation.

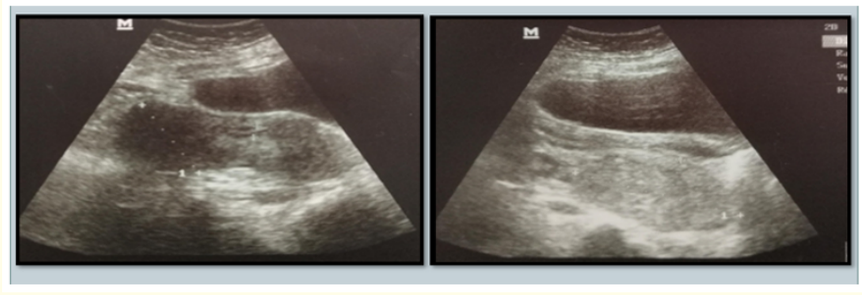

Figure 1: *Ultrasound image.*
Retro-uterine tissue mass filling the Douglas-fir CDS of 9.5 cm long axis.
Sub-serous fundal and corporeal post myomas of variable size, the largest measures 5.5 x 5 cm.
The two unseen ovaries.
Lack of effusion.

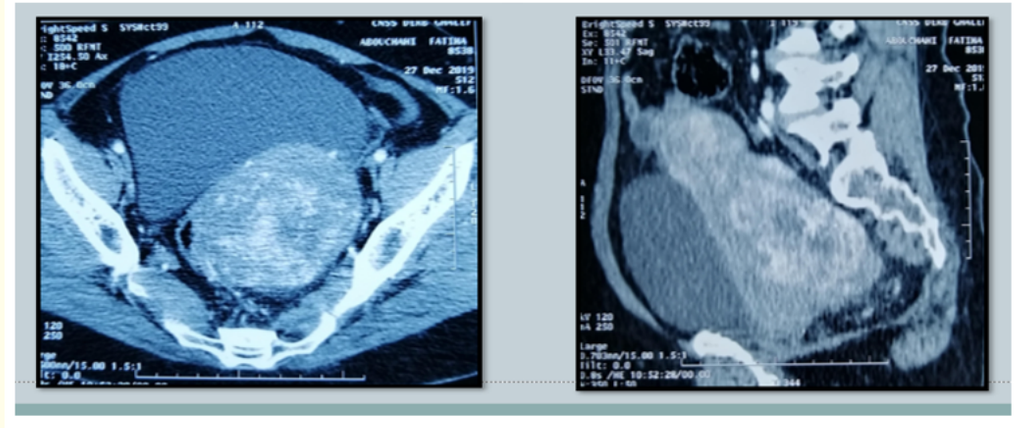

Figure 2: *Heterogeneous globular uterus.*
Multiple interstitial fibrous nodules post and sub serous, fundic and isthmic.
The most voluminous: interstitial post of 82 x 78 mm.
No deep ADP, ovaries: normal in appearance.

Discussion

STUMP, which is considered a subtype of uterine smooth muscle tumors, is a rare tumor, so the incidence is not well known [3]. In the review of Madi and al, STUMPs represent 1/3 of uterine sarcomas and 1.3% of uterine cancers [4].

Uterine smooth muscle tumors have historically been distinct in benign leiomyomas and malignant leiomyosarcomas based on cytologic atypia, mitotic level and the presence or absence of tumor cell necrosis (CTCN) [5].

Toro., *et al*. [6] compared the incidence of leiomyosarcoma between Caucasian and African American women and found that the incidence in African American women was 1.7 times that in Caucasian women.

Mean age is 45 years [2-7]. Most of the patients are premenopausal [2].

The clinical examination is identical to that of uterine leiomyomas and no specific clinic allowing to suspect this diagnosis, no means of imaging can also be distinguished [8].

Generally, the diagnosis of STUMP is confirmed after myomectomy or hysterectomy according to three histological criteria mentioned above. If the tumor does not meet criteria for leiomyosarcoma, and has combinations of Stanford's criteria, STUMP diagnosis is accurate [3].

Surgery is the only treatment admitted, conservative treatment if desired procreation, or radical treatment by total hysterectomy with or without adnexectomy according to the patient's age [4]. There is no established consensus regarding the management of this pathology [8].

The different studies have found a recurrence rate markedly reduced compared to leiomyosarcoma as well as survival at 5 years ranging from 92 to 100% of patients [9].

The recurrence rate after hysterectomy and myomectomy is similar [7]. The recurrence rate after myomectomy is 6.6% [10].

Patients should undergo regular follow-up every 6 months for the first 5 years, then once a year monitoring for the next 5 years [8]. Consultations should include a general clinical and radiological examination [11,12].

Conclusion

STUMP is a rare heterogenous tumor. All the cases were operated with benign preoperative gynecological diagnosis and final diagnosis has been made histopathological. We have limited literature information for STUMP. Preoperatively, sonographic discrimination from leiomyoma or leiomyosarcoma is not possible definitely. Surgery is the mainstay of treatment. Regular follow-up is necessary to detect recurrences and treat them early.

Conflict of Interest

The authors have no conflicts of interest to declare.

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