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Mixed Müllerian Tumor of Uterus

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Abstract:- Mixed Müllerian tumor of uterus or uterine carcinosarcoma is a rare and very aggressive high-grade endometrial cancer, occurring in postmenopausal women, often discovered following postmenopausal metrorrhagia. it has the same risk factors for endometrial cancer, its diagnosis is based on pre-therapeutic biopsy of the endometrium. Therapeutic management is multimodal and includes surgery, chemotherapy, radiotherapy. The prognosis is poor with a 5-year survival rate between 30 and 50% for all stages combined.

Keywords: *- Uterine Carcinosarcoma, Mixed Müllerian Tumor, Endometrial Cancer.*

I. INTRODUCTION

Uterine carcinosarcoma (UCS) or mixed müllerian malignancy is an aggressive high-grade endometrial cancer containing both carcinomatous and sarcomatous elements differentiated from the same precursor cell [1]. It is a very rare tumor but its incidence has started to increase in recent years, exceeding 5% of all uterine malignancies [2]. The risk factors associated with the development of UCS are identical to those of other endometrial carcinomas, such as obesity, nulliparity, the use of exogenous estrogens or tamoxifen treatment. Previous pelvic irradiation has been implicated as a risk factor in 5-30% of patients [5].

II. OBSERVATION

A 70-year-old, postmenopausal, Gravida 5 Para 5 patient presenting with metrorrhagia, whose clinical examination found a three-centimeter mass exteriorized through the cervix, bleeding on contact, with a normal exocervix, and an increased uterus dimension. Biopsy of the process delivered through the cervix was in favor of a histological and immunohistochemical appearance of a mixed malignant müllerian tumor. Pelvic Magnetic Resonance Imaging (MRI) showed a uterus with two intracavitary tissue masses, one at the anterior cervical-isthmic level measuring 30mm x 58mm, and the other mass at the posterior uterine wall measuring 29x27mm. Both masses were heterogeneously enhanced after injection of a contrast product (figure 1). Computed tomography (CT) did not show any distant metastases.

The patient underwent a laparotomy with total hysterectomy, bilateral adnexectomy, peritoneal cytology, bilateral pelvic and lomboaortic curage, omentectomy and multiple biopsies. The hysterectomy specimen was open and two soft intracavity masses were found. The histological examination showed a carcinosarcoma with a majority of serous adenocarcinoma and undifferentiated sarcoma. Pelvic and lumbo-aortic curage were positive. The patient underwent adjuvant radiotherapy with chemotherapy.

III. DISCUSSION

Uterine carcinosarcoma is a tumor with a very poor prognosis that is characterized by the presence of two malignant histologic contingents, carcinomatous (epithelial) and sarcomatous (mesenchymal). The carcinomatous component can be either low-grade or high-grade endometrial cancer, while the sarcomatous component can be either homologous or heterologous. Homologous sarcoma includes leiomyosarcoma, fibrosarcoma, and endometrial stromal sarcoma, whereas heterologous sarcoma includes rhabdomyosarcoma, chondrosarcoma, and osteosarcoma [6,7].

Metrorrhagia is the most common symptom of CSU, but it can also be revealed by pyometria, hydrorrhea, pelvic pain with a sensation of pelvic heaviness, and more rarely, the exteriorization of a mass through the cervix.

Preoperative diagnosis is essential in order to optimize surgical treatment. It can be done by biopsy curettage of the endometrium, biopsy of exteriorized lesions and especially endometrial biopsy preferably guided by hysteroscopy.

Magnetic resonance imaging (MRI) can help in the diagnosis by showing lesions that enhance early after injection of gadolinium with a contrast intensity greater than that of the myometrium. The existence of areas of intralesional necrosis is also very specific. Doppler ultrasonography does not help to orientate the diagnosis [8]. Thoracic-abdominopelvic CT scans eliminate metastases.

Surgery is the first-line treatment consisting of total hysterectomy with bilateral adnexectomy by laparotomy associated with omentectomy and pelvic and lombo-aortic curage; peritoneal cytology and peritoneal biopsies are recommended. Park et al. recommend pelvic and lombo aortic lymphadenectomy. They found 50% of positive

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lombo-aortic nodes in pelvic positive patients and 7% of positive lombo-aortic nodes in pelvic negative patients [9].

Adjuvant chemotherapy with platinum salts has shown its beneficial effect on overall survival [10]. The addition of radiotherapy with chemotherapy further improved overall survival (5-year rate, 92.6%) [11]. Recent clinical trials are more interested in molecular therapy based on the discovery of the role of epithelial-mesenchymal transition (EMT) in the pathogenesis of sarcomatous dedifferentiation in UCS and that heterologous sarcoma is associated with a higher EMT signature compared with homologous sarcoma. They concluded that anti-EMT therapy could be a promising therapeutic strategy [2].

The main prognostic factor is the surgical stage of the tumor according to the International Federation of Gynecology and Obstetrics. Other prognostic factors have been studied such as age, histological grade, homologous or heterologous nature of the tumor, thickness of myometrial invasion but the results are controversial. UCS is often diagnosed at an advanced stage. Five-year survival varies according to the authors between 30 and 50% for all stages combined [12].

IV. CONCLUSION

Uterine carcinosarcoma is a high-grade endometrial cancer with a very poor prognosis. Its diagnosis is confirmed by endometrial biopsy, and its management is multimodal and based on surgery and adjuvant radiochemotherapy. Anti-EMT molecular therapy could be a promising therapeutic strategy.

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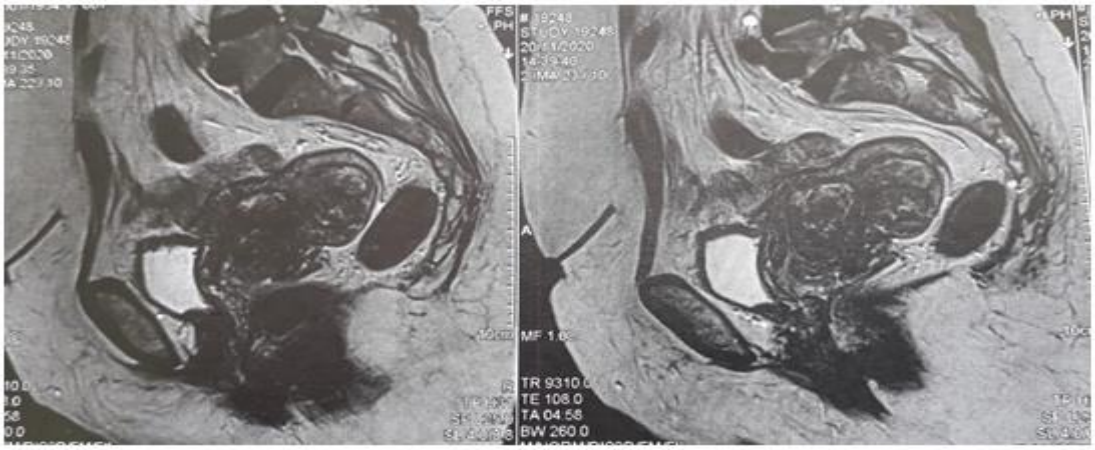

Figure 1 : MRI Images showing uterus with two formations, one anterior isthmic and the other higher on the posterior wall, both heterogeneously enhanced after injection.

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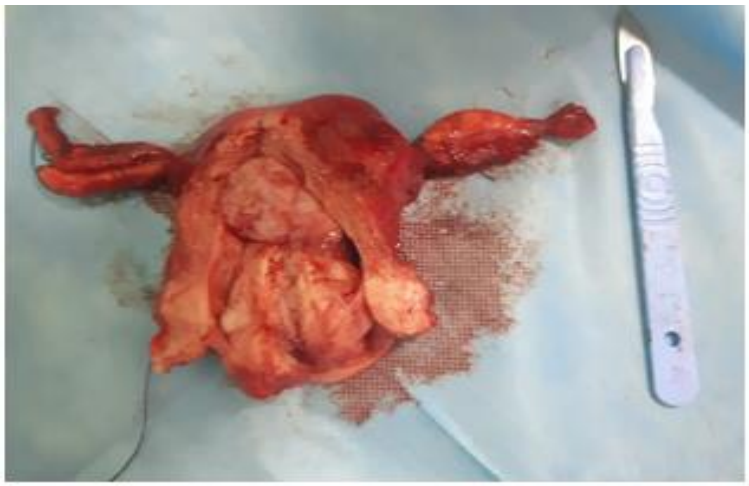

Figure 2 : Image showing the presence of two intracavity masses after opening of the hysterectomy specimen.