

Ovarian Carcinosarcoma : A case report and review of literature

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ABSTRACT: The Ovarian Carcinosarcoma also known as malignant mixed Müllerian tumor is a rare malignant neoplasm that histologically contain both epithelial and stromal components. This aggressive tumor is found not only in the ovary but also in other organs of the genito-urinary tract, including uterus. It is usually diagnosed at older age and advanced stage. The Ovarian Carcinosarcoma patients have very poor prognosis. Surgical treatment is a determining factor for the survival of patients. The response rate to chemotherapy is about 20 %. We illustrate the article with a clinical case reporting the positive diagnosis of ovarian carcinosarcoma.

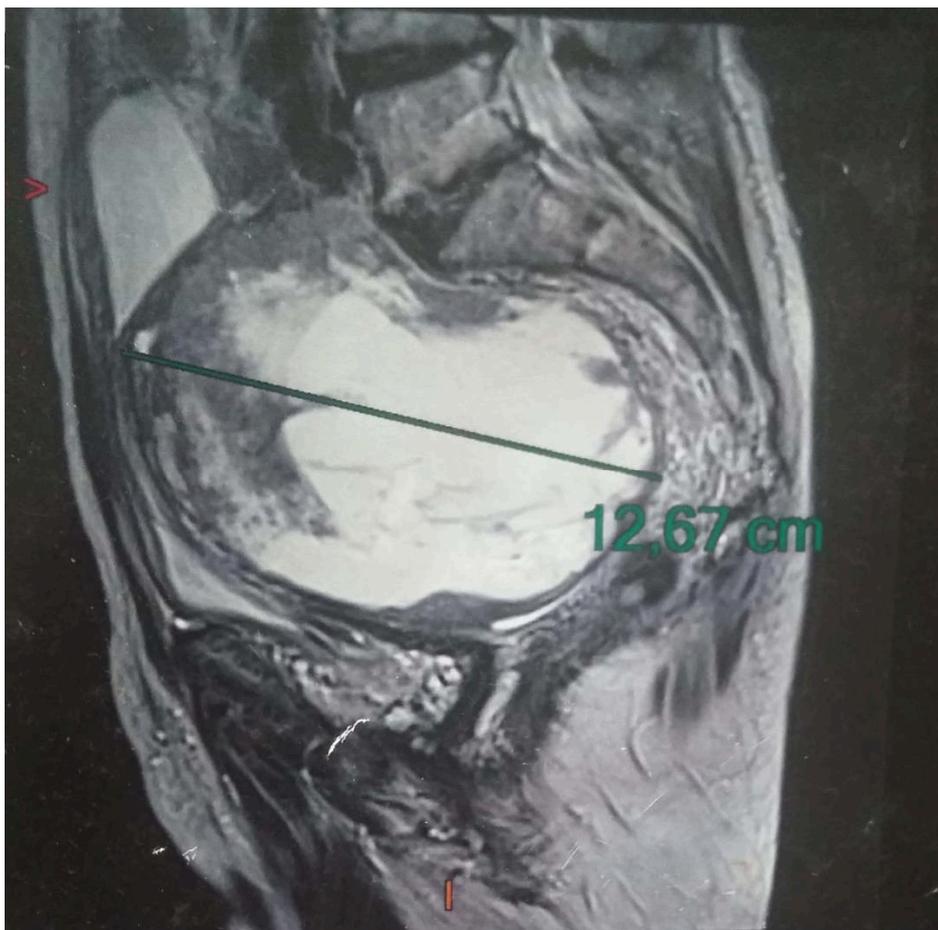
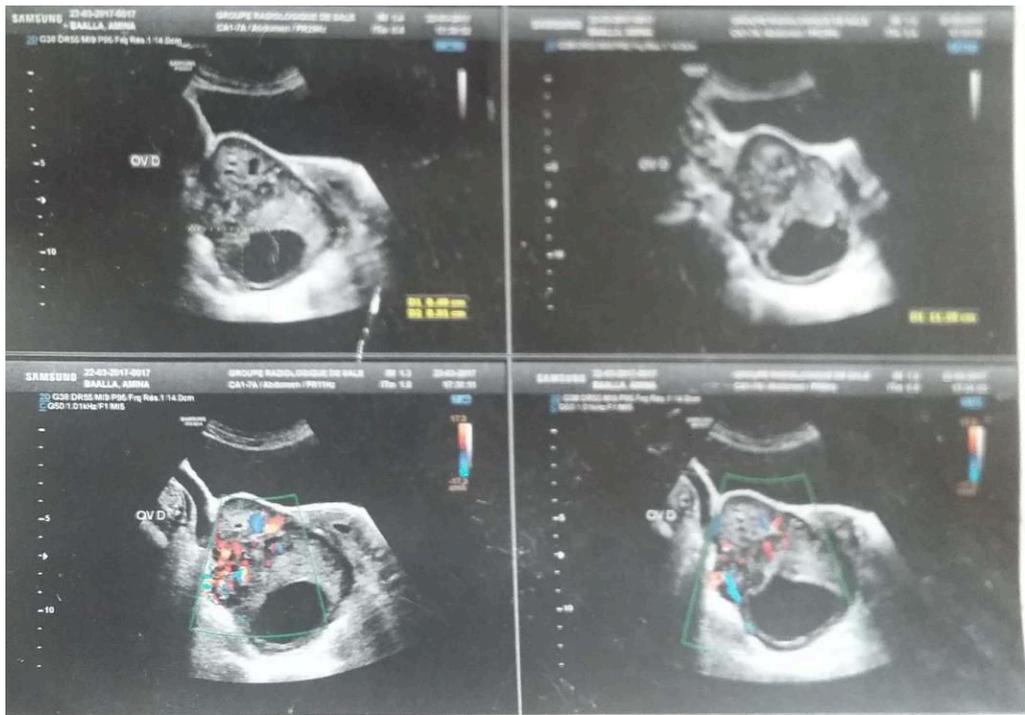
KEYWORDS: Ovarian Carcinosarcoma, malignant tumor, epithelial, stromal, poor prognosis.

1 INTRODUCTION

The Ovarian Carcinosarcoma (CSO), also known as mixed mesodermal tumor or tumor mixed Mullerian is a rare ovarian tumor, deemed to be highly aggressive, representing less than 2% of cancers of the ovary [1]. Less than 400 cases have been reported in the literature. It is characterized by the association of a carcinomatous component and a sarcomatous component. We report a case observed and supported in motherhood Souissi in RABAT.

2 COMMENT

63 years old patient, with the medical history high blood pressure balanced under medical treatment for one year, operated on for bilateral cataract 2 years ago, 3 children living birth normal, menopausal for 18 years. Presenting for 3 months a pelvic pain associated with an urgent burn and pollakiuria, all operating in a context of apyrexia and preservation of the general State. Examination on admission objectified a sensitivity with mass right lateral uterine whose size was difficult to assess. Pelvic ultrasonography had highlighted a multilobed double cystic component right lateral uterine mass and tissue, the latter was hyper vascularized by the doppler. This mass measured 11.5 cm of centerline. The ultrasound examination had not put in evidence of uterine anomaly or ovarian left or peritoneal carcinoses. According to the MRI this double component mass measured 12.67 cm. A biological check carried out, was back to normal apart from the CA-125 which was high. We have programmed the patient for a laparotomy pre-anesthetic consultation. After a median incision under umbilical, we explored the pelvis, to objectify a mass ovarian right making about 12cm 10 cm, adherent to the small intestine in posterior, driving back the bladder in earlier, and a slight peritoneal carcinoses. We have achieved a reduction in tumor with cystic content puncture and biopsy epiploic and peritoneal. The postoperative were without fault. The histological study with Immunohistochemistry was back in favor of an ovarian Carcinosarcoma. We have made an assessment of the extension back to normal, and we sent the patient to the national Institute of Oncology for therapeutic supplement. The patient was lost to view.



3 DISCUSSION

The Carcinosarcoma (CS) still called malignant tumor biphasic problem of pathogenesis oncology care and prognosis [1]. It is a rare tumor that is found at the level of the female genital tract, most often at the level of the uterine body and more rarely at the level of the cervix, vagina, horns or ovarian [2]. To explain the coexistence of two types of distinct cells, four theories have been issued [3]:

- the collision theory which suggests that the carcinoma and Sarcoma are two independent cancers;
- The theory of combination: it assumes that the two components are derived from the same cell that differs soon during tumor development.
- Conversion theory suggests that the Sarcoma elements derived from carcinoma during the growth of the tumor.
- The theory of composition that evokes the existence of a sarcomatous nickname reaction of the stroma in the presence of carcinoma. This last theory is easily excluded, because in these malignancies, the Sarcoma contingent is histologically malignant without a doubt.

Currently, scientific research agrees that most, but not all, cells of the CS are monoclonal deriving from the same cell, and that the carcinomatous component is the *primus* of these cancers [1]. Indeed, from the work done on the uterine CS, it was found the same mutation, TP53, on the two components of the CS showing their common origin [1]. According to the sarcomatous component, we define two types: either the sarcomatous component is normally present in the ovary, we then speak of *peer* CS. either the component is formed usually absent elements (cartilaginous, bony tissue, striated... muscle fibers), we then speak of *Heterologous* CS.

The heterologous type is more often described [4]. The tumor varies over the disease: at diagnosis, the carcinomatous elements predominate, while in case of recidivism, the Sarcoma elements predominate [5-7].

The CS reached women, often nulliparous, between the sixth and the seventh decade. The age at diagnosis is significantly higher in the case of CS case of epithelial tumor of the ovary (TEO) [4-7];

The clinical presentation of the CS is non-specific. The most common symptom is abdominal distension. It can be associated with abdominal pain, transit disorders and impaired general condition [8]. Very often, the diagnosis is made at an advanced stage of the disease [3,5,7-11].

Metastatic locations differ either from those of epithelial tumors of the ovary [11,12]. The interest of the dosage of the CA125 in the CS has been studied [7,13,14]. It is increased in 75-85% of cases [7,11]. Although not confirmed, it seems to be a marker in the therapeutic evaluation in the absence of clinical or radiological test.

The scarcity of the CS explains that there is no consensus on its support. There is very little data. The essential role of surgery seems well established. It has been shown, significantly, that optimal surgery longer median survival (14.8 months for optimal surgery versus 3.1 months for suboptimal surgery for stage III, $p = 0.0003$) [11].

For adjuvant treatment, the only published essay is Tate Thigpen for the Gynecologic Oncology Group (GOG) [15]. The substance used is cisplatin. The response rate is 20%, which is comparable with that observed in the case of uterine CS. Given the low incidence of the CSO, the implementation of therapeutic trial is difficult. The GOG proposes to extend the results already observed with the uterine CS at the CSO. Ifosfamide

and cisplatin are, then, the two most interesting substances (doxorubicin showed a less effective in a study of the GOG on uterine sarcomas) [15-20].

The CS is an aggressive tumor, the five-year survival ranges from 6 to 30% [2,4,5,9-11]. The initial stage is the only prognostic factor found in the various studies [5,9,10].

The advanced, more the prognosis is pejorative. The size, histological type (heterologous or homologous), age do not intervene in the prognosis.

4 CONCLUSION

The CS is a particular, rare entity, in the pejorative prognosis. Little case was brought back in the literature. Two histological types are described: the type heterologous and the equivalent type, but without incidence on the prognosis. Indeed, the only factor prognosis found in the various studies is the initial stage. The survival in five years is lowered when it is compared with the epithelial tumors of the ovary. The slightest sensibility in the chemotherapy offers to the surgery an essential place, this one that must be the most complete possible.

REFERENCES

- [1] Muller M, Dupre PF, Lucas B, et al (2007) Le carcinosarcome ovarien. *J Gynecol Obstet Biol Reprod* 36(4):399–402
- [2] Bicher A, Levenback C, Silva EG, et al (1995) Ovarian malignant mixed müllerian tumors treated with platinum-based chemotherapy. *Obstet Gynecol*85:735–9
- [3] Hanjani P, Peterson RO, Lipton SE, Nolte SA (1983) Malignant mixed mesodermal tumors and carcinosarcoma of the ovary: report of eight cases end review of the literature. *Obstet Gynecol Surv*38:345–57
- [4] Hellström AC, Tegerstedt G, Silfvård C, Petterson F (1999) Malignant mixed müllerian tumors of the ovary: histopathologic and clinical review of 36 cases. *Int J Gynecol Cancer* 9:312–5
- [5] Ariyoshi K, Kawachi S, Kaku T, et al (2000) Prognostic factor in ovarian carcinosarcoma: a clinicopathological and immunohistochemical analysis of 23 cases. *Histopathology*37:427–36
- [6] Plaxe SC, Dottino PR, Goodman HM, et al (1990) Clinical features of advanced ovarian mixed mesodermal tumors and treatment with doxorubicin and cisplatin based chemotherapy. *Gynecol Oncol*37:244–9
- [7] Amant F, Vloeberghs V, Woestenborghs H, et al (2003) Transition of epithelial toward mesenchymal differentiation during ovarian carcinosarcoma tumorigenesis. *Gynecol Oncol*90:372–7
- [8] Prendeville J, Murphy D, Rennison J, et al (1994) Carcinosarcoma of the ovary treated over a 10-year period at the Christie hospital. *Int J Gynecol Cancer* 4:200–5
- [9] Chang J, Sharpe JC, A'Hern RP, et al (1995) Carcinosarcoma of the ovary: incidence, prognosis, treatment end survival of patients. *Ann Oncol*6:75
- [10] Harris M, Delap L, Sengupta P, et al (2003) Carcinosarcoma of the ovary. *Br J Cancer* 88:654–7
- [11] Brown E, Stewart M, Rye T, et al (2004) Carcinosarcoma of the ovary. *Cancer* 100:2148–53
- [12] Harris M, Delap L, Sengupta P, et al (2003) Carcinosarcoma of the ovary. *Br J Cancer* 88:654–7
- [13] Eichhorn J, Young R, Clement P, Scully R (2002) Mesodermal (müllerian) adenosarcoma of the ovary: a clinicopathologic analysis of 40 cases and a review of the literature. *Am J SurgPathol*26:1243–58
- [14] Rustin G, Nelstrop A, Bentzen S, et al (2000) Selection of active drugs for ovarian cancer based on CA125 and standard responderates in phase II trials. *J Clin Oncol*18:1733–9
- [15] Rustin G, Nelstrop A, McLean P, et al (1996) Defining response of ovarian carcinoma to initial chemotherapy according to serumCA125. *J Clin Oncol*14:1545–51
- [16] Thigpen JT, Blessing JA, De Geest K, et al (2004) Cisplatin as initial chemotherapy in ovarian carcinosarcomas: a Gynecologic Oncology Group study. *Gynecol Oncol*93:336–9
- [17] Sutton GP, Blessing JA, Rosenshein N, et al (1989) Phase II trial for ifosfamide and mesnain mixed mesodermal tumors in the uterus. *Am J ObstetGynecol*161:309–12
- [18] Gershenson DM, Kavanagh JJ, Copeland LJ, et al (1987) Cisplatin therapy for disseminated mixed mesodermal sarcoma of the uterus. *J Clin Oncol*5 :618–21
- [19] Thigpen T, Lambeth BN, Vance RB (1992) The role of ifosfamidein gynecologic cancer. *Semin Oncol* 19 :30–4
- [20] Omura GA, Major FJ, Blessing JA, et al (1983) A randomized study of Adriamycin with and without dimethyltriazinoimidazole carboxamide in advanced uterine sarcomas. *Cancer* 52:626–32