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INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/18764
DOI URL: http://dx.doi.org/10.21474/IJAR01/18764

RESEARCH ARTICLE

PRIMARY OVARIAN MALIGNANT MIXED MULLERIAN TUMOUR: A CASE REPORT

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Manuscript Info

Manuscript History
Received: 20 March 2024
Final Accepted: 27 April 2024
Published: May 2024

Key words:-
Carcinosarcoma, Malignant Mixed Mullerian Tumour, Ovarian Cancer, Chemotherapy

Abstract

Introduction: Malignant Mixed Mullerian Tumour of the Ovary (OMMMT), also known as carcinosarcoma, is a very rare tumor that represents less than 1% of all ovarian cancers. Because of its rarity, its course and treatment remain controversial

Importance: It is an aggressive tumor often discovered at an advanced stage, with a double carcinomatous and sarcomatous component that affects the ovary, the main prognostic factor being the stage of the disease Current data in the literature are still limited to small case series and case reports and treatment consists of cytoreduction surgery followed by platinum-based chemotherapy.

Case presentation: We report a case of a 54 years old patient being managed at our center, having been diagnosed by aMalignant Mixed Mullerian Tumour of the Ovary, with no distant metastases.

Clinical discussion: This case highlightsthe misfortune of having a delayed diagnosis of an ovarian tumor which opens the door to the following question: is screening for ovarian tumors possible, as the treatment becomes more and more complicated in advanced cases

Conclusion:OMMMT is an uncommon condition with limited knowledge of effective therapies.Finding an early cancer diagnosis rather than waiting for the best possible treatment is still a difficulty.

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Introduction:-

Ovarian malignancies are mixed mullerian tumors of the ovary (MMOMT), also known as ovarian carcinosarcomas. These tumors are extremely aggressive and feature a dual component (carcinomatous and sarcomatous) [1–3].

Although there is currently a lack of data in the literature, chemotherapy followed by surgery improves overall survival [8].

We describe a case that is currently being managed at CHU Mohammed 6 Oujda, Morocco.

Report case:

The patient was 54 years old, G4P4, postmenopausal for 2 years, with no pathological history. She presented with chronic pelvic pain with abdominal distension and bloating for more than 6 months with a good general condition, weighed 70 kg (BMI: 26.3), the patient was stable and apyretic

A soft abdomen, no soreness, and a mass that has reached the umbilicus have been felt during a gynecological exam.

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Vaginal examination reveals a healthy cervix, no bleeding a mass that extends to the umbilicus, a uterus with a size that is difficult to discern due to the mass, a filled cul de sac.

An ultrasound revealed a normal-sized uterus (59 mm/33 mm) with a thin endometrium, the presence of a hypoechoic picture above the uterus with necrotic patches that were vascularized by Doppler and had a 140 mm long axis, and a modest quantity of ascites.

Ca125 assay results coming back at 271 U/ml.

Pelvic MRI reveals a massive centro-pelvic lesional process measuring 152 mm by 150 mm by 83 mm, with a very likely right ovarian origin that appears suspicious and is in close proximity to the left ovary, which is atrophic With medium-level ascites abundance. (figure1)

CAT scan reveals a solid-cystic supra-uterine tumor with a significant amount of peritoneal effusion that is suspected to be cancerous and that measures 131 mm/96 mm and is likely of ovarian origin (no distant metastases).

The patient underwent an exploratory medium laparotomy

Upon examination, there was a large mass with friable component bleeding on contact and necrotic on the right ovary, as well as a moderate amount of serosanguineous ascites. (figure2).

The decision was made to conduct a total hysterectomy along with bilateral adnexectomy removal of the mass, omentectomy, cytology, and peritoneal biopsy due to the macroscopic malignant character of the mass.

The microscopic view revealed a twofold malignant proliferation of the ovarian tissue, which was primarily necrotic and mesenchymal.

The serous high grade carcinomatous growth with a papillary, tubular, and enormous architecture makes up the epithelial component.

Malignant sarcomatous growth with a heterologous appearance and patches of chondrosarcomatous and rhabdomyo-sarcomatous differentiation make up the mesenchymal component. (figure 3,4,5,6)

There is no tumor infiltration in the uterine body, cervix, fallopian tubes, right ovary, peritoneal biopsies, or epiploic tissue.

After surgery It was suggested to use systemic Paclitaxel and carboplatin as an adjuvant chemotherapy agent every three weeks for six cycles. That was taken by the patient, without any side effects.

One month later, the patient went back for a gynecological exam, an ultrasound checkup, and a CT scan. There were no special circumstances.

With remote locoregional control and Ca 125: 4 at this time, one year after finishing chemotherapy (negative).

There is no sign of recurrent illness in the patient.

Discussion:-

OMMMT, also known as CSO, is a relatively uncommon clinical entity of ovarian malignancies and has a carcinomatous and sarcomatous component, according to its histological description [1–3].

With an average age of 67.5 years [5], our study's findings are similar to those of Lozzi.T et al., whose cases were all postmenopausal women with an average age of 65 years [2]. It affects women most frequently who are nullipart [3], which was not the case for our study. Menopausal, and in some cases also in obese women [1 - 2], between the sixth and seventh decade.
OMMMT are the most aggressive tumors, with late detection and a poor long-term outlook [2–3].

This is the most frequently described type and the one of the present study, but the sarcomatous type is not thought to be a prognostic factor [4]. Histologically, two carcinomatous epithelial components and a sarcomatous mesenchymal component are described. The latter is either present in the ovary and is referred to as homologous OMMMT or it is formed from bone, cartilage, muscle tissue... and is referred to as heterologous

Few research have been conducted because to the disease's rarity [6-7]; the table below lists the primary series of CSO investigations.

Rustin and Brown investigated the relevance of the Ca125 test in OMMMT [9, 16, 17]. It is raised in 75% to 85% of patients [9, 18].

The main treatment is cytoreduction followed by platinum-based chemotherapy [5] with large residuals > 2cm and advanced stage having both prognostic factors as epithelial ovarian cancers despite the fact that there is no therapeutic consensus due to the rarity of OMMMT.

According to Rauhn-hainAj et al's study, optimal cytoreduction improved overall survival when compared to poor cytoreduction [8].

With response rates between 65% and 80%, combined platinum-based chemotherapy seems to be successful after surgery [1, 4].

Although local recurrence has decreased, adjuvant radiation has not been found to improve overall survival [15].

Conclusion:-

Optimal cytoreduction surgery followed by platinum-based chemotherapy seems to enhance survival outcomes with stage of illness being the most important predictor of survival [7, 5, 9] despite the fact that OMMMT is an uncommon condition with limited knowledge of effective therapies.

Finding an early cancer diagnosis rather than waiting for the best possible treatment is still a difficulty.

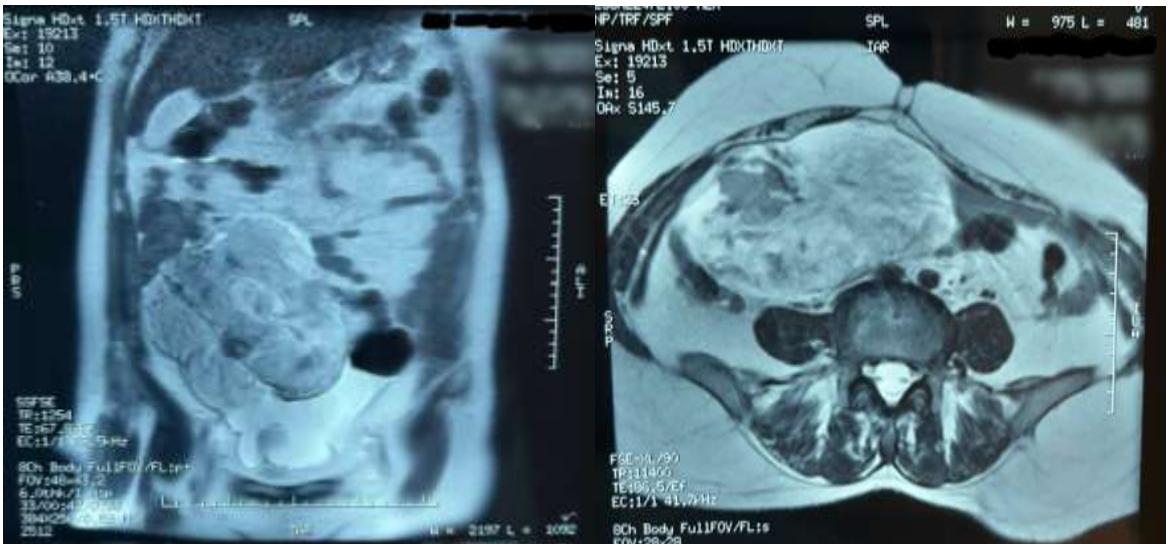

Fig 1:- Pelvic MRI showing a large centropelvic lesion process measuring 152x150x83 mm.

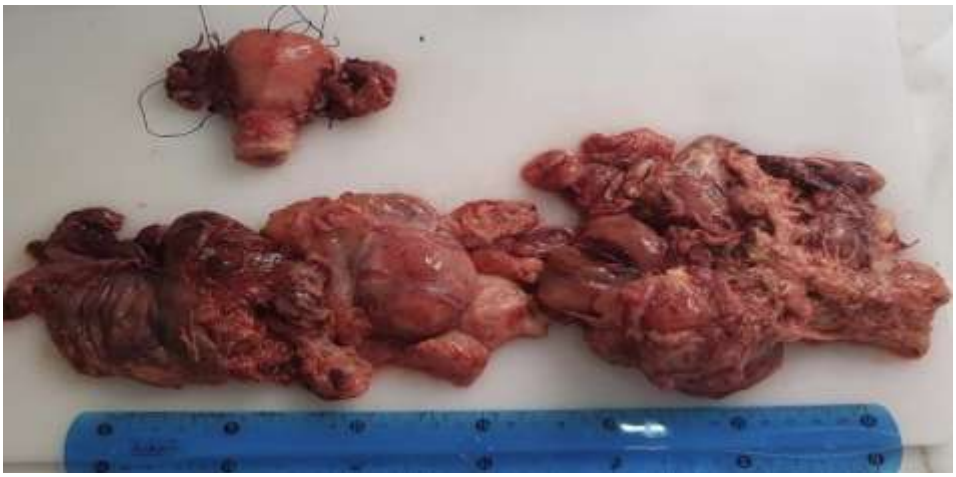

Fig 2:- Complete surgical piece.

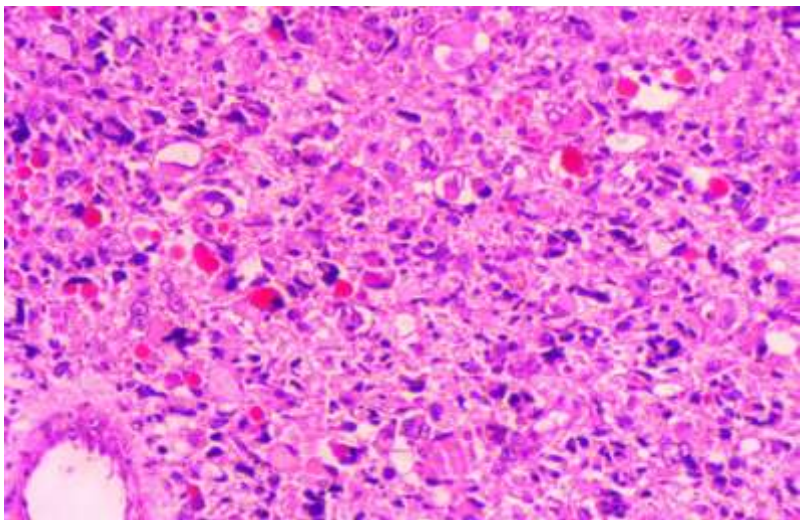

Fig 3:- Histological image showing the sarcomatous component with rhabdoid aspect.

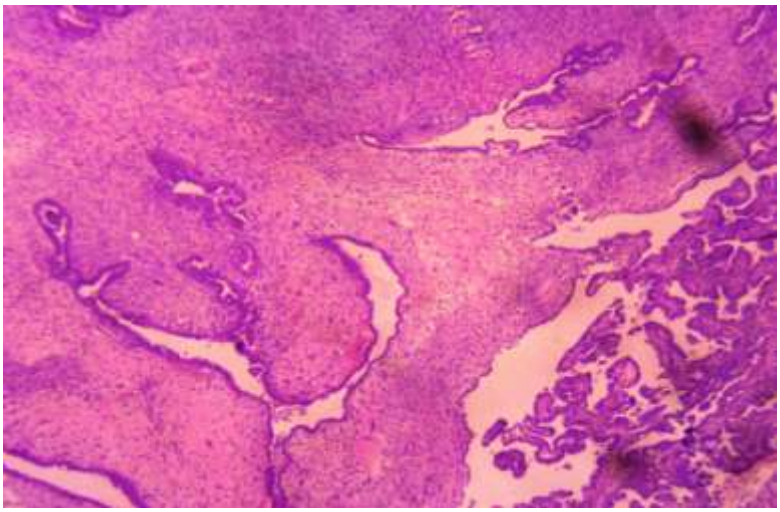

Fig 4: Appearance of the double sarcomatous component made up of spindle-shaped and carcinomatous cells.

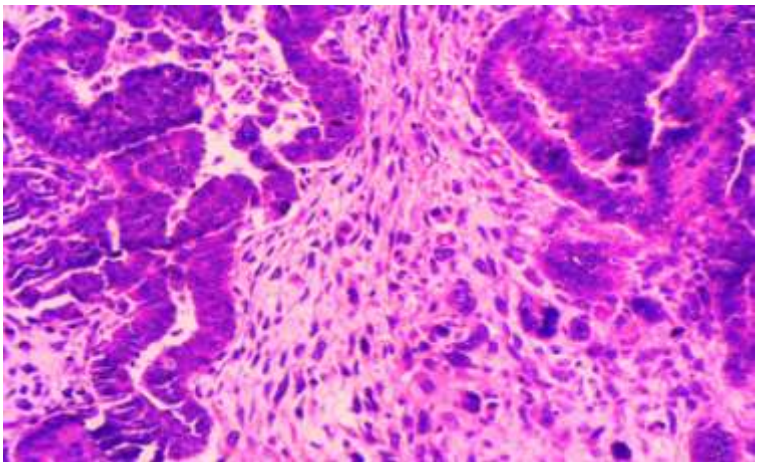

Fig 5:double epithelial and sarcomatous component

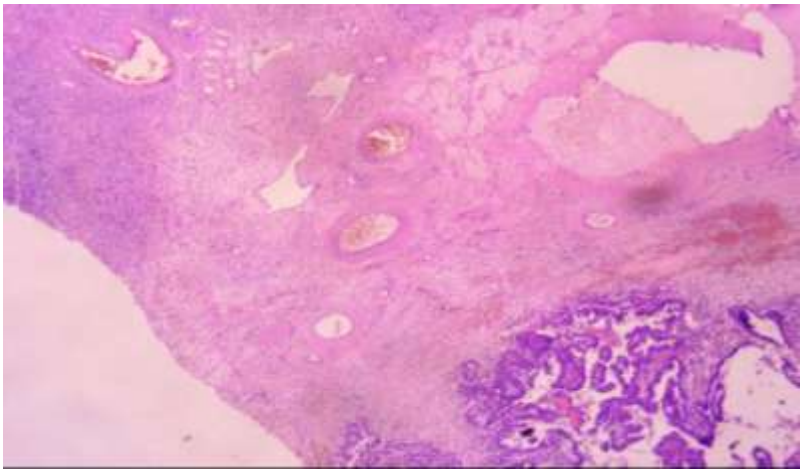

Fig 6:- Image of the ovarian site showing the ovarian origin of the proliferation.

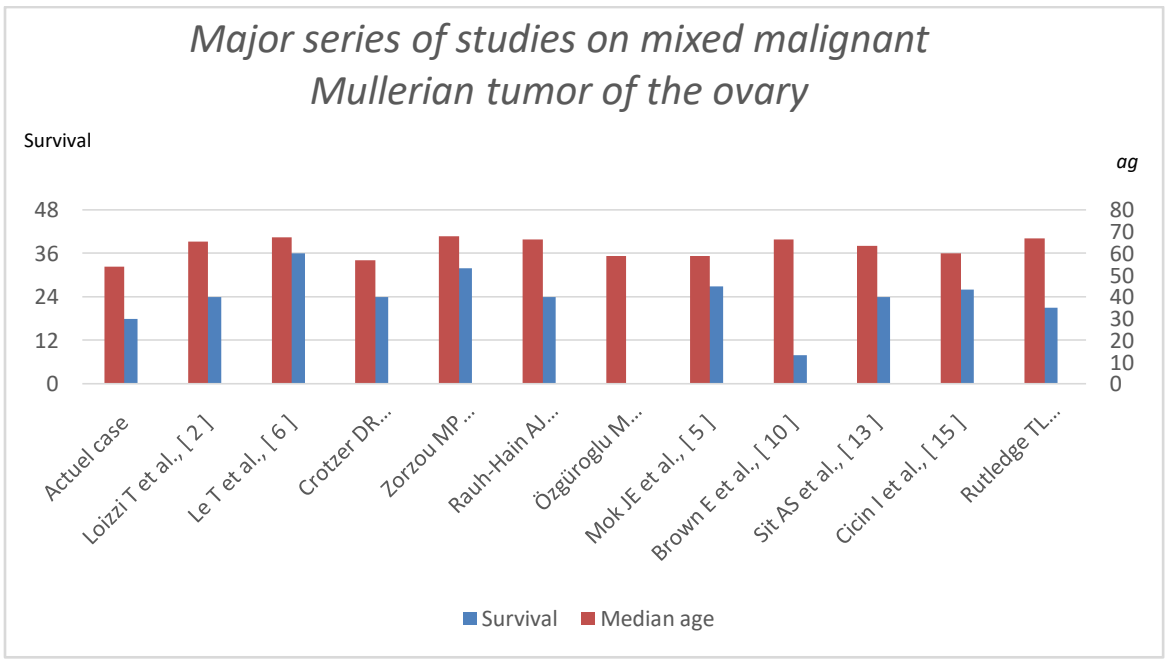

Fig 7:- Major series of studies on mixed malignant Mullerian tumor of the ovary.

Consent to publish
Written informed consent was obtained from the patient forpublication of this case report and the accompanying images. A copy ofwritten consent is available for review by the Editor-in-Chief of thisjournal on request.

Ethical approval
Ethics approval was obtained from our University by the Human Research Ethics Committee :Comité d'Ethique pour la Recherche Biomédicaled 'Oujda(**CERBO**).

Funding
This research did not receive any specific grant from fundingagencies in the public, commercial, or not-for-profit sectors.

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Research registration number:
Researchregistry8814

Credit authorship contribution statement
El Filali Amal:
Investigation, Writing – original draft, Writing – review & editing, Visualization.

Slama Loubna:
Conceptualization, Validation, Writing – review & editing, Visualization, Supervision.

Taheri Hafsa:
Writing – review & editing, Visualization.

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Writing – review & editing, Visualization**.**

Mimouni Ahmed:
Validation, Writing – review & editing, Supervision, Project administration.

Declaration of competing interest
The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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