

Case Report

Malignant Mixed Mullerian Tumour of Ovary: A Case Report

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<p>Corresponding Author: Priyanka Parakh, Senior Resident, Department of Pathology, RNT Medical College, Udaipur, Rajasthan 313001, India. E-mail: priyanka_parakh@hotmail.com Received on 16.09.2018, Accepted on 01.10.2018</p>	<p>Abstract</p> <p>Malignant Mixed Mullerian tumour (MMMT) of ovary is a rare, neoplasm accounting for less than 1% of all ovarian cancers. They are histologically biphasic tumours with both carcinomatous (epithelial) and sarcomatous (stromal) elements. Most women are post-menopausal at the time of presentation and usually between their 6th to 8th decades of life. On imaging, it is not possible to differentiate carcinosarcomas from other ovarian neoplasms and therefore the diagnosis is essentially based on histopathologic findings. It is associated with an aggressive clinical course and overall poor prognosis. We present a case of bilateral ovarian cancer in a 60-year-old female with complaints of abdominal mass, ascites, anaemia and histologically diagnosed as Primary Mixed Mullerian tumour in one ovary and Serous Papillary Adenocarcinoma in another ovary. She underwent total abdominal hysterectomy with bilateral salpingo oophorectomy and adjuvant chemo radiotherapy.</p> <p>Keywords: Bilateral; Malignant Mixed Mullerian Tumour; Serous Papillary Adenocarcinoma.</p>
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Background

Ovarian carcinosarcoma, also called Malignant Mixed Mullerian Tumour (MMMT), is a rare variant of ovarian cancer, constituting less than 1% of all primary ovarian tumours, with fewer than 400 cases reported in the literature [1].

We present a case of bilateral ovarian cancer with carcinosarcoma in one ovary and papillary serous adenocarcinoma in another ovary.

Case Report

A 60 yrs. old postmenopausal, multiparous

woman presented with chief complaints of progressive diffuse abdominal pain, abdominal distension and weight loss for 1 month.

There was no significant family history and, nor any past history of hormone therapy or major systemic disease.

Physical examination showed a palpable large pelvic mass. Laboratory Investigations revealed microcytic hypochromic anemia and raised serum CA125(123.4U/l) level.

USG showed a large solid cystic heterogeneously enhancing mass in left adnexa, bulky right ovary with heterogenous enhancement and Omental thickening.

CT Scan also showed a large cystic mass with heterogenous enhancing solid component in pelvis, enlarged right ovary with heterogenous enhancement and moderate to gross ascites.

A provisional diagnosis of bilateral ovarian cancer with peritoneal carcinomatosis was made.

The patient underwent laparotomy followed by removal of pelvic mass and total abdominal hysterectomy with bilateral salpingo-oophorectomy.

We received a large fungating soft tissue mass measuring 18*15*5 cm identified as left adnexa along with hysterectomy specimen with attached right sided ovary measuring 8*5*2 cm. Cut surface of larger mass was variegated, solid and cystic with areas of hemorrhage and necrosis. Right ovary showed papillary formations with areas of necrosis and haemorrhage [Figure 1]. The tissue was routinely processed, with the sections being cut and stained with H & E.

On Microscopic examination the uterus showed simple hyperplasia of endometrium and cervix showed chronic nonspecific cervicitis with nabothian follicle.

Left adnexal sections showed an intimate mixture of malignant epithelial and stromal elements. The epithelial component showed features of serous, endometrioid, squamous cell and clear cell carcinoma. The malignant stromal component showed features of chondrosarcoma. These features were suggestive of malignant mixed mullerian tumour (heterologous component) [Figure 2 & 3].

Right ovarian sections showed papillae with fibrovascular core lined with multiple layers of cells showing pleomorphism, high grade nuclear atypia and bizarre mononuclear



Fig. 1: Gross specimen showing Large multinodular grey white mass with areas of hemorrhage and necrosis (Left adnexal mass) along with a smaller grey white mass with some papillary formations (Right adnexal mass) attached to uterus.

giant cells. Cribriform, labyrinthine, solid patterns and occasional psammoma bodies were also seen. These features were suggestive of papillary serous adenocarcinoma [Figure 4]. Sections of both fallopian tubes were unremarkable. FIGO Staging 2A was given.

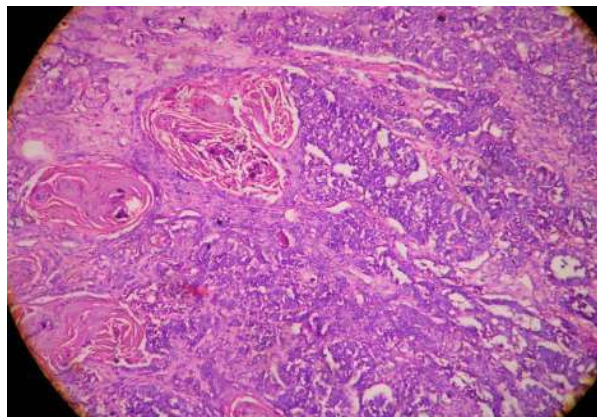


Fig. 2: Malignant Mixed Mullerian Tumor (Left Ovary) Irregular malignant glands with squamous cell carcinoma. H&E (4x)

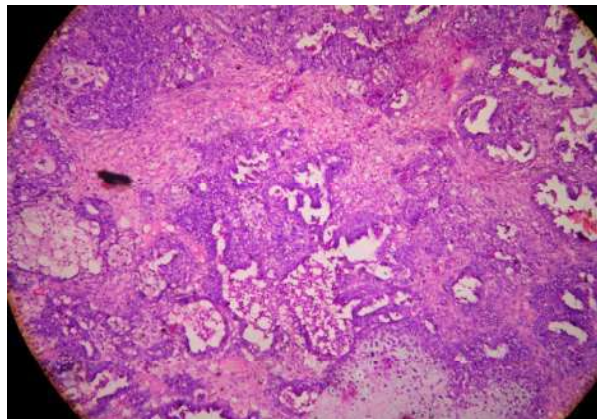


Fig. 3: Mixed Mesodermal Tumor (Left Ovary). Irregular malignant glands with chondrosarcomatous and malignant clear cell elements (heterologous) H&E. [4x]

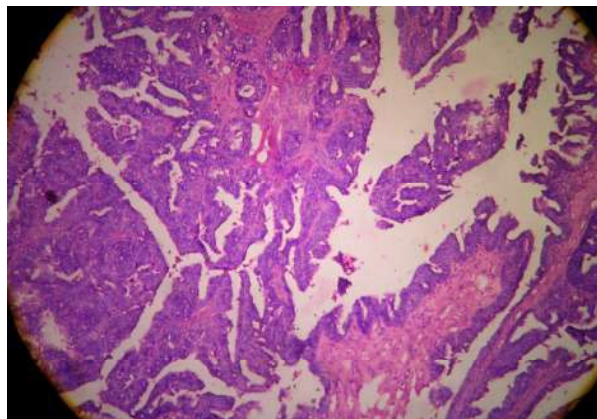


Fig. 4: Papillary Serous Adenocarcinoma (Right Ovary). Complex papillary architecture with nuclear pleomorphism (4x)

Discussion

Carcinosarcomas of ovary are rare tumours and consist of a mixture of malignant epithelial and malignant mesenchymal components [1]. The coexistence of carcinomatous and sarcomatous elements may be due to a collision tumour (two separate malignant cell population) or a combination tumour (common stem cell origin) [2]. Most women are post-menopausal and with history of low parity [3]. In our case the patient was multipara and post-menopausal

The majority of patients with MMT of the ovary present at a very advanced stage at the time of surgery (stage 3 or 4) [4] and more than 70% die at 1 year after diagnosis [5]. Rare patients present with early stage tumours stage 1 and 2 they have longer survival and are most likely to be cured [6]. In our case the patient presented in FIGO stage 2A and possibly due to an early stage of presentation is still surviving till date.

The presence of papillary serous adenocarcinoma in right ovary suggests a synchronous bilateral ovarian cancer (Left ovary Malignant Mixed Mullerian Tumour and right ovarian serous papillary adenocarcinoma) which is extremely rare [7].

Conclusion

A synchronous bilateral ovarian cancer presenting with left ovarian Malignant Mixed Mullerian Tumor (MMMT) and right ovarian serous papillary adenocarcinoma was diagnosed in a 60 years post-menopausal multiparous woman with FIGO stage 2A and due to an early stage of diagnosis the patient is still surviving.

The presence of papillary adenocarcinoma in the other ovary will also affect the prognosis.

The poor prognosis emphasizes the need of collaborative prospective studies to diagnose such type of synchronous tumors at an early stage so as to improve the survival of patients.

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