Abstract:
Chondrosarcoma of the uterus is an extremely rare type of pure heterologous uterine sarcoma. Here a case report of a 60 year old woman presented with postmenopausal bleeding, she was evaluated and managed by Total Abdominal Hysterectomy with Bilateral Salpingo-oophorectomy. As a follow up histopathological Examination of the specimen revealed Malignant Mixed Mullerian Tumour Heterologous differentiation (CHONDROSARCOMA) with myometrial invasion. Hence patient underwent External Radiotherapy and Brachytherapy. Thus chondrosarcoma of the uterus can no longer be treated in a homogenous fashion.

Keywords: Uterine sarcoma, Chondrosarcoma, MMMT

INTRODUCTION:
Uterine Sarcoma are relatively rare tumours of mesodermal origin. They constitute 2% to 6% of uterine malignancies with an annual incidence of 1.23/100,000 of the female population. The three most common Histologic variants are Endometrial Stromal Sarcoma, Leiomyosarcoma and Malignant Mixed Mullerian Tumour of both homologous (smooth muscle) & heterologous (cartilage, striated muscle, bones) type.

CASE REPORT:
A 60 yr old diabetic, hypertensive, postmenopausal women presented with complaints of bleeding per vaginum since one week – first episode. She attained menopause 10 year back. She was admitted and evaluated. Hb was 10.8gms, renal function test and Liver function test was normal. USG pelvis shows Bulky Uterus with thickened Endometrium 1.4 cm. Fractional Curettage and cervix biopsy suggests High Grade Stromal Sarcoma, (Malignant Mixed Mullerian Tumour need to be excluded) and Chronic Cervicitis. MRI shows a large mass in the pelvis that entirely obliterated the uterus, inhomogeneously low intensity of T1W1 and heterogenous appearance on T2W1. Cystoscopy was normal. Patient was managed with Exploratory Laparotomy proceeded with Total Abdominal...
Hysterectomy with Bilateral Salpingo-oophorectomy and pelvic lymphadenectomy and Omentectomy done. Her postoperative period was uneventful. Histopathological Examination of the specimen revealed Malignant Mixed Mullerian Tumour Heterologous differentiation (CHONDROSARCOMA) with myometrial invasion. Both Tubes and ovaries, cervix, lymph node, omentum shows free of tumour. No malignant cell was found in peritoneal fluid. Oncologist opinion obtained. Patient started on External Radiotherapy 50.4 Gy, in daily dose of 1.8 Gy 5 days per week, and Brachytherapy 11.4 Gy in 3 doses of 3.8Gy as an outpatient.

**Fig.1 Uterus with Bilateral tubes and ovaries**

**Fig.2 Cut section of Uterus**

**DISCUSSION:**
Chondrosarcoma of the uterus is rare tumour. The average age of presentation is 62 years. Most frequent symptom is Postmenopausal bleeding. There is increased incidence of uterine sarcoma with history of previous irradiation. It usually forms a large fleshy mass protruding into the uterine cavity. Due to the totipotent nature of endometrial stromal cells, it may be homologous or heterologous. Raised CA125 levels have been associated with extraterine disease and deep myometrial invasion in Chondrosarcoma patients. Uterine leiomyomas can be associated with elevated levels of CA125 and this should be taken into account in the diagnostics of uterine Leiomyosarcoma.

Diagnosis is made usually following histological examination of the removed uterus. Treatment is Total Hysterectomy with Bilateral Salpingo-oophorectomy followed by radiotherapy. Neither radiotherapy nor chemotherapy has improved survival in adjuvant settings. However, radiotherapy may reduce the risk of local recurrence. For early-stage Chondrosarcoma, improved local control is the strongest evidence for adjuvant pelvic radiotherapy. Adjuvant radiotherapy for Leiomyosarcoma and Endometrial stromal sarcoma patients is thought to be non-beneficial, Chemotherapy - Active cytotoxic drugs are carboplatin, cisplatin, ifosfamide and paclitaxel. Combinations of ifosfamide and
carboplatin, or carboplatin and paclitaxel have been demonstrated to be the most beneficial regimens in first-line therapy, both in early- and advanced-stage Chondrosarcoma. The most important single factor affecting prognosis is extent of tumour at the time of treatment. Recurrences develop in more than one half of cases of uterine sarcoma, even when disease is apparently localized at the time of 6 treatment.

The best 5-year survival rates are found among patients with Endometrial stromal sarcoma and the worst among patients with Chondrosarcoma and Leiomyosarcoma. Overall 5-year survival in all cases of uterine sarcoma has varied from 17% to 59% in different reports.

Conclusion:
Chondrosarcoma of the uterus is an extremely rare uterine tumour usually diagnosed by the pathologist. The prognosis of uterine sarcomas is dependent on histological subtype, grade, and stage. The histological subtypes of Endometrial stromal sarcoma, early stage and low grade of uterine sarcoma are associated with better outcome. In addition, adjuvant radiotherapy decreases local recurrence rate but without significant affect on survival. Local control was significantly improved after adjuvant radiotherapy, with best results at a dose higher than 50Gy. The emerging concept is that uterine sarcomas can no longer be treated in a homogenous fashion.

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