

for tumour resection. Pathology reported a juvenile granulosa cell tumour of the ovary. Early stage granulosa cell tumor surgically treated has good prognosis. Adjuvant chemotherapy is not indicated in this setting.

## Endometrium: Oral Abstract

### Study of factors to predict recurrence in early stage endometrial cancer

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**Introduction:** Risk stratification of patients with early endometrial cancer for recurrence is inadequate.

**Objectives:** To study factors that influence recurrence in uterus-confined, early stage endometrial cancer (UCD).

**Patients and Methods:** We studied 140 consecutive patients with endometrial cancer, operated at Action Cancer Hospital, Delhi, from August 2010 to September 2015. All patients underwent staging laparotomy, TAH + BSO + BLPND + para-aortic LN sampling, and omental biopsy. Adjuvant treatment was given as per the NCCN guidelines. They were followed up 3 monthly for 2 years, and 6 monthly thereafter. 121 patients (86.4%) had UCD (FIGO stages IA, IB, II). Excluding one post-operative mortality, and 4 who were lost to follow up, we included 116 patients in this study.

**Results:** The median age of these patients was 60.5 years (range: 35-81 years), with median BMI of 31.2 kg/m<sup>2</sup> (range= 19.8-57.5). Diabetes or hypertension was present in either or both of 76 (65.5%) patients. The median pelvic LN harvest was 17 (range: 4-42). Eight (6.9%) patients had non-endometroid histology, and 5 (4.3%) patients had LVSI. Grade 1, 2, and 3 tumor was found in 74 (63.8%), 30 (25.9%), and 12 (10.3%) patients, respectively. The median follow up was 28 months (range 5-61 months), and recurrence was seen in 13 (11.2%) patients. On univariate analysis we found that age, co-morbidities (DM and HT), LVSI, and non-endometroid histology were related to recurrence. The tumor grade and adjuvant treatment did not influence recurrence rates. On multivariate analysis, presence of comorbidities and non-endometroid histology were independently related to disease recurrence (p=0.044, and 0.011, respectively).

**Conclusions:** Disease recurrence was seen in one in ten patients with UCD, despite stage-appropriate treatment. Presence of co-morbidities and non-endometroid histology were independently related to recurrence.

## Uterus: Oral Abstract

### Outcomes of carcinosarcoma of the uterus

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**Objectives:** To evaluate the outcome of women with uterine carcinosarcoma. **Methods:** The medical records of all patients admitted with uterine carcinosarcoma between January 2012 and October 2015 were reviewed. Baseline characteristics were compared and survival was calculated using Kaplan Meier method and compared using log rank test.

**Results:** The total number of uterine malignancies operated in our centre over this time period was 247 of which 33 were sarcomas (13%). Median age of presentation was 56 years (21-77 years). Most women were postmenopausal (76%) and 46% of them presented with post menopausal bleeding.

There were 16 carcinosarcomas of the uterus. Eight presented at Stage 1 (50%) and the remaining 8 in stage III or IV. All patients had TAH/BSO but only 15 had omentectomy and 12 had pelvic and para-aortic lymphadenectomy. Adjuvant treatment was given only to 10 (63%). Seven patients had expired at the time of follow up. The mean survival was 502 days (304-699) with a median of 284 days. Patients who received adjuvant therapy did better compared to those who did not (p=0.05).

**Conclusions:** Carcinosarcomas are aggressive tumours and the optimal therapy is yet to be determined. Adequate surgical staging followed by adjuvant therapy improves survival.

## Uterus: Oral Abstract

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**Introduction:** Uterine sarcoma accounts for nearly 3% of all uterine malignancies. They have 4 major pathology includes endometrial stromal sarcoma high grade, ESS low grade, uterine leiomyosarcoma (uLMS) and undifferentiated uterine sarcoma (UUS). Recent WHO classification 2014, recognizes low grade ESS and high grade ESS as distinct entity. They differ from endometrial carcinoma in their aggressive nature and poor prognosis. We review our database and found total 44 eligible patient treated at our institute. **Materials and Methods:** Its retrospective analysis of computer based database of our institute from January 2009 to December 2015. We analyzed demographic, pathological, treatment and survival data.

**Results:** Total 44 patient treated for uterine sarcoma at our institute. Among these 16 were operated at our institute during study period. Here we reporting results of operated patients at our institute. The histological diagnosis LMS (5/16), ESS-L (4/16), MMMT (3/16), UUS (3/16) and ESS-H (1/16). Stage distribution was stage I, (6/16) stage II, (5/16) stage III, (3/16) stage IV, (0/16) and unknown stage (2/16). Two patients underwent completion surgery for outside myomectomy. The adjuvant treatment was CT in 3/16, CT with RT in 7/16, HT in 4/16 and one lost to follow up with one was put on observation. Median follow up is 30 month with 14 patients alive and one lost to follow up. At last follow up 4 patients alive with metastatic disease and 10 patients alive with no evidence of disease.

**Conclusion:** Uterine sarcoma are uncommon disease with

## Endometrium: Oral Abstract

### Preoperative and intraoperative assesment of myometrial invasion and histological grade in endometrial cancer: Role of MRI and frozen section

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**Introduction:** The role of systematic lymphadenectomy in clinically early stage endometrial cancer is controversial. A number of factors can predict lymph node metastasis including myometrial invasion, tumor grade in endometrial cancers. The purpose of the present study is to evaluate the accuracy of preoperative MRI and intraoperative frozen section in determining the depth of myometrial invasion, cervical involvement, tumor size and lymph nodal status. We also studied the accuracy of preoperative endometrial biopsy and intraoperative frozen section in determining the grade of the tumor.

**Materials and Methods:** Medical records of 235 consecutive cases of clinically early stage endometrial cancer were reviewed retrospectively. A record of depth of myometrial invasion, tumor size, cervical involvement and presence of enlarged lymph nodes was made on a preoperative MRI. Similarly depth of myometrial invasion, tumor size, cervical involvement and grade of the tumor were recorded on an intraoperative frozen section. The grade of the tumor was also recorded on a preoperative endometrial biopsy. Standard statistical calculations were used.

**Results:** The sensitivity and specificity of MRI for myometrial invasion for the first 160 cases were 81.3 and 75%, respectively while that for frozen section were 80 and 96.2%, respectively. For tumor grade the sensitivity and specificity of preoperative endometrial biopsy were 60 and 95.6%, respectively while that of frozen section were 53.8 and 97.6%, respectively. For cervical involvement the sensitivity of MRI and frozen section was 62.5 and 98.4%, respectively. Updated results of the entire cohort of 235 cases will be presented at the conference if selected.

**Conclusion:** Although the sensitivity of both frozen section and MRI for predicting deep myometrial invasion was similar (80 vs 81.3%) but the specificity (96.2 vs 75%) and negative predictive value (92.7 vs 88.2%) of frozen section were superior to MRI. Both preoperative biopsy and intraoperative frozen section had low sensitivity (60 vs 53.8%) for detecting a high grade lesion.

## Endometrium: Oral Abstract

### Study of PTEN immunohistochemical expression in endometrial hyperplasia

**Sabuhi Qureshi**