**Results** A 51 years old lady with no co-morbid history had primary debuking surgery followed by adjuvant chemotherapy for high grade serous ovarian adenocarcinoma stage 3c. Her BRCA test result was negative. She was under surveillance follow-up with no evidence of recurrence from biochemical profile (CA-125) and imaging study until 7 years later. Her CA-125 level increased 2 fold from the baseline with solitary splenic recurrence of ovarian cancer from the CT scan. Fine needle biopsy of the splenic mass revealed metastatic serous adenocarcinoma. She underwent an uncomplicated splenectomy followed by 6 cycles of adjuvant chemotherapy. The histopathology report showed metastatic serous adenocarcinoma. After 2 years of the treatment, she is still under surveillance with no evidence of recurrence.

**Conclusion** Recurrence of ovarian cancer with distant metastasis is very rare. Cytoreduction surgery (splenectomy in the case described above) followed by adjuvant chemotherapy showed promising result to patient.

# IGCS20_1157

| 171 | HUMAN PAPILLOMAVIRUS GENOTYPE AND LONG-TERM CLINICAL OUTCOMES OF VULVAR MALIGNANCIES |

[1]H Tung*, [1]Y Tang, [2]L Yang, [1]H Huang, [3]R Wu, [2]Y Pan, [3]S Jung, [1]C Lin, [4]C Wang, [1]A Chao, [1]M Chen, [1]W Chen, [1]K Huang, [1]TC Chang, [1]CH Lai. [1]Department of Obstetrics and Gynecology, Chang Gung Memorial Hospital, Linkou Branch and Chang Gung University, Taiwan; [2]Clinical Trial Center, Chang Gung Memorial Hospital Linkou Branch, Taiwan; [3]Department of Pathology, Chang Gung Memorial Hospital and Chang Gung University College of Medicine, Taiwan; [4]Department of Radiation Oncology, Chang Gung Memorial Hospital and Chang Gung University College of Medicine, Taiwan

**Objectives** To analyze prevalence of HPV DNA, HPV genotype distribution, prognostic factors and long-term outcomes of vulvar carcinoma.

**Methods** We retrospectively reviewed medical records of patients with vulvar carcinoma who received primary surgeries between 1985 and 2014 in a single institution. General polymerase chain reaction (PCR) SPF1/GP6+ followed by revertblot detection was performed for human papillomavirus (HPV) genotyping. E6 type-specific PCR of the top-5 prevalent types was performed to reconfirm HPV-negative status. P16INK4a immunohistochemistry staining was performed. Univariate and multivariate analyses were performed to identify predictors of clinical outcomes of squamous cell carcinomas (SCCs).

**Results** A total of 150 vulvar carcinoma patients eligible for analysis were retrieved. Medial follow up time was 71.4 months (0.2–341.8 months). One hundred and twenty-nine patients (86.0%) were diagnosed as SCC. In SCC specimens, HPV DNA sequences were detected in 56.6%, and 14.3% of non-SCC vulvar cancer (n = 21) were HPV positive. The leading 4 types were HPV16 (54.0%), HPV58 (15.8%), HPV52 (6.6%), and HPV18 (5.3%). HPV-positivity was associated with better 5-year cancer-specific survival (CSS) (P = 0.037). In multivariable analysis, older age (continuous, hazard ratio [HR] 1.06, 95% confidence interval [CI] 1.03–1.08, P <0.001), advanced International Federation of Gynecology and Obstetrics (FIGO) stage (III-IV vs I-II, HR 3.86 95%CI 2.01–7.42, P <0.001) were independent adverse predictors of CSS, while p16-positivity (0.36, 95%CI 0.19–0.69, P =0.002) was related to better prognosis.

**Conclusion** Advanced FIGO stage and older age were significant adverse predictors, while p16-positivity was a significant factor of better prognosis.

# IGCS20_1158

| 172 | LATE EFFECTS ON RECTUM AND URINARY BLADDER IN CERVICAL CANCER BRACHYTHERAPY: DOSE EFFECT RELATIONSHIP AND ICRU RECTUM AND BLADDER POINT DOSE CORRELATION |

S Mathews*, H Balachandran, A Kumar, J Joseph, R Kumar, J Krishna KM, FV James. *Regional Cancer Centre, India*

Traditional Manchester Point based brachytherapy continues to be popularly practiced even when CT imaging has replaced traditional X-rays for treatment planning. ICRU bladder and rectal Point doses are documented and monitored as predictive of Organs at Risk (OAR) doses.

**Aim** To study the late effects of treatment and its correlation with dose volume parameters. Dosimetric correlation between volume doses and corresponding ICRU Rectum and Bladder point doses were studied.

**Materials and Methods** 101 Cervical cancer patients treated during 2014 – 2016 with radio-chemo therapy and CT based Brachytherapy treatment planning were eligible. Bladder, rectum and sigmoid were retrospectively contoured on CT data sets and Dose volume histogram for doses to the most exposed portion of (D2cc) OARs were recorded and compared with corresponding ICRU Point doses. Patients were followed up till August 2019 and toxicity data collected prospectively using CTCAE V4.03. Correlation of toxicity with doses received was attempted.

**Results** The overall incidence of bladder toxicity was 19.8% and rectal toxicity 30.7%. Grade 2 &3 toxicities were < 5% for bladder and 13% for rectum. 1 patient developed Grade 4 rectal toxicity.

The threshold dose for bladder toxicity was D2cc- 89 Gy and 67 Gy for rectum. Grade 4 toxicity occurred with D 2cc - 83 Gy.

There was no correlation between bladder D2cc and ICRU bladder point doses. Moderate correlation was seen between rectal D2cc and dose to point R (0.62)

**Conclusion** Monitoring D2cc of OARs should be attempted on CT in an attempt to reduce morbidity even with traditional planning.

# IGCS20_1160

| 174 | OBESITY AND VISCERAL FAT: SURVIVAL IMPACT IN ENDOMETRIAL CANCER |

[1]H Donkers*, [2]K Fasmer, [1]J McGrane, [3]H Pijnenborg, [4]R Bekkers, [2]I Haldorsen, [1]K Galaal. [1]Royal Cornwall Hospital, UK; [2]Haukeland University Hospital, Norway; [3]Radboud University Medical Center, Netherlands; [4]Maastricht University, Netherlands

**Background** Obesity is an important risk factor for the development of endometrial cancer and is associated with poor