IGCS20_1096

SIMPLE VAGINAL TRACHECTOMY IN WOMEN WITH EARLY-STAGE LOW RISK CERVICAL CANCER WHO WISH TO PRESERVE FERTILITY: THE NEW STANDARD OF CARE?

M Plante*, M Renaud, A Sebastianelli, J Gregoire. L’Hôpital-Dieu de Quebec, CHU de Quebec, Canada

Objective There is a trend towards less radical surgery in women with small volume disease who wish to preserve fertility. The objective of our study was to evaluate the oncologic and obstetrical outcomes of simple vaginal trachelectomy (SVT) and node assessment in patients with low-risk early-stage cervical cancer (< 2 cm).

Methods From May 2007 to January 2020, 50 women underwent a SVT/conisation with laparoscopic SLN mapping + pelvic node dissection. Data was collected prospectively in a computerized database. Descriptive statistics and Kaplan-Meyer estimate were used for analysis.

Results Patients’ median age was 29 and 35 (70%) were nulliparous. Eleven had stage IA1 with LVS1, 13 IA2 and 26 IB1 (52%). Twenty-six (52%) had squamous histology and 20 (40%) adenocarcinoma. Of final pathology, lymph nodes were negative in 46 patients (92%), 3 had isolated tumor cells and one micrometastasis. Thirty patients (60%) had either no residual disease in the trachelectomy specimen (22) or residual dysplasia only (8). With a median follow-up of 76 months (1–140), there was only one recurrence. The 5-year progression-free and overall survival are 97.9% and 97.6% respectively. There were 40 pregnancies: 5 (12.5%) ended in the first trimester, one in second trimester and only 3 (7.5%) were late preterm (34.4, 35 and 35 weeks); all the others (30 or 75%) delivered > 36 weeks and one pregnancy is ongoing.

Conclusion Based on our experience, simple trachelectomy and nodes is an oncologically safe fertility-preserving surgery in well-selected patients with small volume cervical cancer. Obstetrical outcome is excellent.

IGCS20_1097

RESULTS OF A RANDOMIZED PHASE II TRIAL OF PACLIAXEL AND CARBOPLATIN VERSUS BLEOMYCIN, ETOPOSIDE AND CISPLATIN FOR NEWLY DIAGNOSED AND RECURRENT CHEMO-NAIVE STROMAL OVARIAN TUMORS

1 Brown*, 2 A Miller, 3 K Movley, 4 E Backes, 5 C Nagel, 6 D Bender, 7 D Miller, 8 M Powell, 9 S Westin, 10 A Bonebrake, 11 C Muller, 12 A Alvarado Secord, 13 E Crane, 14 W Tew, 15 A Sood, 16 C Aghajanian, 17 Levine Cancer Institute at Atrium Health, USA; 18 RSG Oncology, USA; 19 University of Oklahoma, USA; 20 The Ohio State University, USA; 21 Case Western Reserve University, USA; 22 University of Iowa, USA; 23 University of Texas Southwestern Medical Center, USA; 24 Washington University, USA; 25 MD Anderson Cancer Center, USA; 26 Cancer Research for the Ozarks, USA; 27 University of New Mexico, USA; 28 Duke University, USA; 29 Tufts University, USA; 30 Memorial Sloan Kettering Cancer Center, USA

Objective To determine the progression free survival (PFS) of paclitaxel and carboplatin (PC) versus bleomycin, etoposide, and cisplatin (BEP) for treatment of newly diagnosed Stage IIIA-IV or recurrent chemotherapy-naive ovarian sex cord-stromal tumors (SCST).

Methods This study was a phase II, open-label, noninferiority trial. Eligible women with SCST were equally randomized to PC (6 cycles P 175 mg/m2 and C AUC=6 IV every 3 weeks), or BEP (4 cycles B 20 units/m2 IV push day 1, E 75 mg/m2 IV days 1–5, and cisplatin 20 mg/m2 IV days 1–5 every 3 weeks). The targeted 128 patient accrual and PFS hazard ratio (HR)=0.67 provided 85% power to exclude noninferiority margin HR=1.10.

Results 63 patients were accrued at the interim futility analysis (31 PC and 32 BEP). Median age was 48 years, 87% had granulosa cell tumors. 37% had measurable disease. The DSMB closed the study early for futility of PC. The futility analysis was supported by 21/16 PFS events on the PC/BEP arms respectively, with an estimated HR=1.12 [95% CI: 0.58 to 2.16]. Median PFS was 27.7 months [7.4 to 41.0] for PC and 19.7 months for BEP [95% CI: 10.4–52.7]. PC patients had fewer grade 3 or higher adverse events (PC 77% vs BEP 90%). Differences included infections (0 vs 10%), low neutrophil count (65% vs 84%), and low WBC (22 vs 40%). One death NOS occurred on PC.

Conclusions Compared to BEP, PC failed to improve PFS in ovarian SCSTs. PC showed a more favorable side effect profile.

IGCS20_1098

A 10 YEAR CLINICO-PATHOLOGICAL STUDY OF RESIDUAL/RECURRENT BORDERLINE OVARIAN TUMOURS IN YOUNG FEMALES UNDERGOING FERTILITY-PRESERVING SURGERY

S Toomey*, M Basha Mohamed, R Arora. University College London Hospitals NHS Foundation Trust, UK

Objective To determine the progression free survival (PFS) of paclitaxel and carboplatin (PC) versus bleomycin, etoposide, and cisplatin (BEP) for treatment of newly diagnosed Stage IIIA-IV or recurrent chemotherapy-naive ovarian sex cord-stromal tumors (SCST).

Methods This study was a phase II, open-label, noninferiority trial. Eligible women with SCST were equally randomized to PC (6 cycles P 175 mg/m2 and C AUC=6 IV every 3 weeks), or BEP (4 cycles B 20 units/m2 IV push day 1, E 75 mg/m2 IV days 1–5, and cisplatin 20 mg/m2 IV days 1–5 every 3 weeks). The targeted 128 patient accrual and PFS hazard ratio (HR)=0.67 provided 85% power to exclude noninferiority margin HR=1.10.

Results 63 patients were accrued at the interim futility analysis (31 PC and 32 BEP). Median age was 48 years, 87% had granulosa cell tumors. 37% had measurable disease. The DSMB closed the study early for futility of PC. The futility analysis was supported by 21/16 PFS events on the PC/BEP arms respectively, with an estimated HR=1.12 [95% CI: 0.58 to 2.16]. Median PFS was 27.7 months [7.4 to 41.0] for PC and 19.7 months for BEP [95% CI: 10.4–52.7]. PC patients had fewer grade 3 or higher adverse events (PC 77% vs BEP 90%). Differences included infections (0 vs 10%), low neutrophil count (65% vs 84%), and low WBC (22 vs 40%). One death NOS occurred on PC.

Conclusions Compared to BEP, PC failed to improve PFS in ovarian SCSTs. PC showed a more favorable side effect profile.
**IGCS20_1100**

**IN SILICO ANALYSIS OF THE IMMUNE CHECKPOINT TIGIT AS A NOVEL IMMUNOTHERAPY TARGET FOR HIGH GRADE SEROUS OVARIAN CANCER**

School of Medicine, University College Dublin, Ireland; Systems Biology Ireland, University College Dublin, Ireland; School of Biochemistry and Immunology, Trinity College Dublin, Ireland

The T-cell immunoglobulin and ITIM domain (TIGIT) is a new inhibitory receptor that represents a novel target for the development of immunotherapy strategies. Using an in-silico approach, we identified differentially expressed genes (DEGs) and enriched pathways associated with TIGIT mRNA expression, in high grade serous ovarian cancer (HGSOC) using the Cancer Genome Atlas (TCGA) and the Australian Ovarian Cancer Study (AOCs).

**Methods** DEGs between patients with high and low TIGIT expression, stratified based on an unsupervised tree analysis were calculated using EdgeR. Enriched pathways with the DEG list were identified using Gene Set Enrichment Analysis (GSEA) using a False Discovery Rate (FDR) <0.25 as significant.

**Results** Increased TIGIT mRNA expression was associated with improved survival in HGSOC (p=0.034). 975 DEGs were identified in the TIGIT high group, and GSEA identified enriched pathways involved in complement activation humoral immune response, suggesting that TIGIT expression may be associated with an immunologically ‘hot’ tumour. This was confirmed by the finding that increased TIGIT expression was associated with an increased lymphocytic infiltration score, CD8+ T cells and Interferon Gamma Response score. Finally TIGIT expression was reduced in AOCS samples from women with acquired platinum resistance compared to matched primary tumour samples (p=0.014)

**Conclusion** TIGIT represents an important prognostic marker in HGSOC. Similar to PD-1/PD-L1, TIGIT is associated with increased tumour infiltrating lymphocytes and an improved prognosis. Platinum resistance is associated with a reduction in TIGIT expression and warrants further study in HGSOC.