Conclusions Systemic chemotherapy with TIP followed by salvage focal treatment is a promising therapeutic approach in selected patients, particularly in younger patients, without comorbidities, good performance status, low metastatic tumor burden, and with an objective response to chemotherapy.

Genetics and Epidemiology

IGCS19-0519

225

PREVALENCE, SPECTRUM AND FOUNDER EFFECT OF BRCA1 AND BRCA2 MUTATIONS IN EPITHELIAL OVARIAN CANCER FROM MIDDLE EAST

¹AK Siraj, ¹R Bu, ¹I Kaleem, ²N Siraj, ²W Al-Haqawi, ³I Al-Badawi*, ²P Sandeep Kumar, ²TA Masoodi, ⁴A Tulbah, ⁵F Al-Dayel, ²KS Al-Kuraya. ¹King Faisal Specialist Hospital and Research Centre, Center for Human Cancer Genomic Research HCGR, Riyadh, Saudi Arabia; ²King Faisal Specialist Hospital and Research Centre, Human Cancer Genomic Research Center, Riyadh, Saudi Arabia; ³King Faisal Specialist Hospital and Research Center, Obstetrics and Gynecology, Riyadh, Saudi Arabia; ⁴King Faisal Specialist Hospital and Research Center, Department of Pathology and Laboratory Medicine, Riyadh, Saudi Arabia; ⁵King Faisal Specialist Hospital and Research Center, Department of Pathology, Riyadh, Saudi Arabia

10.1136/ijgc-2019-IGCS.225

Objectives To characterize the prevalence and effect of BRCA1 and BRCA2 mutations in Middle Eastern EOC patients.

Methods BRCA mutation screening was performed in 407 unselected ovarian cancer patients using targeted capture and/or Sanger sequencing.

Results A total of 19 different pathogenic variants (PVs) were identified in 50 (12.3%) women. Nine PVs were recurrent accounting for 80% of cases with PVs (40/50) in the entire cohort. Founder mutation analysis revealed only two mutations (c.4136_4137 delCT and c.1140 dupG) sharing the same haplotypes thus representing founder mutations in the Middle Eastern population.

Conclusions Identification of the mutation spectrum, prevalence and founder effect in Middle Eastern population facilitates genetic counseling, risk assessment and development of a cost-effective screening strategy.

IGCS19-0167

226

TELOMERASE ENDOMETRIAL CELLS ACTIVITY IN HYPERPLASTIC PROCESSES

¹Z Chumak, ²A Zelinsky, ²V Artyomenko*, ²N Shapoval. ¹Odessa City Climacteric Centre, Odessa, Ukraine; ²Odessa National Medical University, Obstetrics and Gynecology, Odessa, Ukraine

10.1136/ijgc-2019-IGCS.226

Objectives Endometrial hyperplastic processes (EHP) like a combination of stromal and glandular tissue components changes has properties both for self-healing, recurrence and for malignancy, depending on morphological changes degree with markers and predictors conducted research at cellular, molecular-genetic, immune-histochemical levels.

Telomerase activity estimation in endometrial cells at EHP.

Methods According to WHO classification (1994) following groups were formed: I - simple hyperplasia -7 samples; II -

complex hyperplasia -8; III - simple atypical hyperplasia -8; IV - complex atypical hyperplasia -7 specimens. The control groups with morphologically unchanged endometrium -11 samples: V group - proliferation phase - 6 specimens; VI group - secretion phase-5 samples. Relative telomerase activity was determined using real-time PCR with SYBR Green dye (RQ-TRAP) according to Wege et al. methodic. To improve the study accuracy we used from 4 to 6 cells samples and calculated their average value in each experiment.

Results Women age was 45.38 ± 1.66 years. In simple hyperplasia endometrial specimens, telomerase activity was 1.22 ± 0.10 a.u. (pI-IV<0,05), complex hyperplasia - 1.35 ± 0.07 a.u. (pII-pIV<0,05), simple atypical hyperplasia - 1.23 ± 0.08 a.u. (pIII-pIV<0,05). The complex atypical hyperplasia telomerase activity increase reaching 1.54 ± 0.05 a.u. (pIV-pV<0,05; pIV-pVI<0,05) was statistically significant. Therefore, telomerase reactivation in atypical complex hyperplasia can confirm the proliferative stage telomeres lengthening, increasing the ability for cell division, on the other hand, telomerase ability to control cell division in endometrial tissue.

Conclusions The parallelism presence between telomerase activity in approximately 85% of human tumors and telomerase reactivation in endometrial cells with complex atypical hyperplasia makes it possible to determine its activity fact like early malignancy marker.

IGCS19-0248

227

STUDY ON EPIDEMIOLOGY AND SCREENING OF CERVICAL CANCER IN NE INDIA

¹D Barmon*, ²A Rai, ¹A Katak. ¹Dr B. Borooah Cancer Institute, Gynaecologic Oncology, Guwahati, India; ²Dr B. Borooah Cancer Institute, Molecular Biology and Cancer Research, Guwahati, India

10.1136/ijgc-2019-IGCS.227

Objectives As per the GLOBOCON 2018 data India had 96920 new cases of cervical cancer with an AAR of 14.7 per lakh population. Northeast part of India has an interesting feature of having the highest AAR of 30.2/100,000 in Papum-pare district at the same time Dibrugarh district which is less than 100 miles apart has the lowest AAR of 4.9/100,000. So the epidemiological characteristics of cervical cancer is varied in this part of the country. With this background we intend to find out the appropriate screening tests which may be suitable for the region.

Methods Various screening camps were conducted and detail socio demographic records were obtained and after counselling VIA, PAP smear and Care HPV assay (Quagen) were performed on both symptomatic and asymptomatic sexually active women from 20yrs to 65 yrs of age.

Results A total of 479 patients were evaluated of which 75.3% of women were between 20 years to 49yrs, 34.2% of the women had 3 or more children. 38.2% had history of abortion, 43.5% had formal education of 10th grade or more. On screening 5.6% of women had positive VIA, 7.5% had abnormal PAP and 3.7% had positive care HPV test with normal PAP whereas 12.1% had positive Care HPV assay with abnormal PAP.

Conclusions Considering the difficult terrain of the region and looking at the final analysis of the screening tests, Care HPV triaged with VIA seemed to be a good alternative to PAP.