surgery of ovarian or peritoneal carcinoma, decreasing the morbidity of the surgery.

IGCS19-0098

323 MRNA AND PROTEIN EXPRESSION OF E-CADHERIN AND VIMENTIN AND P53 IMMUNOHISTOCHEMISTRY IN EPITHELIAL OVARIAN CANCER

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10.1136/ijgc-2019-IGCS.323

Objectives This study was designed to correlate expression of epithelial mesenchymal transition (EMT) pathway markers i.e., E-cadherin and Vimentin with surgicopathological extent of EOC and to type the tumour using p53 immunohistochemistry staining.

Methods Women with malignant and benign epithelial ovarian tumours were studied. Sample size was calculated with 80% power and 5% level of significance ;22 cases (EOC) and 22 controls (benign ovarian tumour) were recruited. m-RNA and protein expression of E-cadherin and vimentin was done by real time PCR and IHC staining and p53 by IHC. Peritoneal extent of disease was calculated by peritoneal carcinomatosis index (PCI) and tumour resection by completeness of cytoreductive score (CCS) and correlations derived.

Results In advanced EOC, positive correlation was found between PCI and CCS with correlation coefficient of 0.495, p-value < 0.0193. When PCI less than 10 (n=10), CCS0 was achieved. m-RNA expression of E-cadherin was 2.126 times downregulated and of vimentin 2.733 times upregulated in malignant vs. benign tumours. Protein expression of E-cadherin was high in benign vs. malignant EOC (p=0.387) and vimentin protein expression was overexpressed in EOC (p=0.007). No correlation was obtained between EMT markers and metastatic deposits, lymph node or bowel involvement. p53 was expressed in 90.9% (n=10) high grade serous carcinoma and none in low grade serous carcinoma.

Conclusions Expression of E-cadherin decreased and Vimentin increased in EOC which is in synchrony with EMT pathway, however larger studies are needed to derive an association between these markers and extent of disease.

IGCS19-0296

324 MUTATIONAL PROFILING OF BRAZILIAN MUCINOUS ADENOCARCINOMA OF THE OVARY

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10.1136/ijgc-2019-IGCS.324

Objectives To investigate the mutational profiling associated with Brazilian mucinous adenocarcinoma of ovary.

Methods We included 47 patients from Barretos Cancer Hospital, from 2009 and 2015. The mutation profile of a panel of hotspot regions of 15 cancer drivers (*AKT1, BRAF, EGFR, ERBB2, FOXL2, GNA11, GNAQ, KIT, KRAS, MET, NRAS, PDGFRA, PIK3CA, TP53*) was performed by NGS using the Illumina TruSight Tumor 15 panel on MiSeq instrument (Illumina, USA) in a subset of cases. Hotspots regions of the KRAS (codons 12 and 13) were screened by PCR followed by direct Sanger sequencing. Finally, *HER2* amplification was evaluated by immunohistochemistry (IHC) and *in situ* hybridization (FISH).

Results HER2 IHC was performed in 27 samples that showed absence of staining in 25 (92.6%). Two samples (7.4%) showed inconclusive IHC reaction, and FISH analysis showed HER2 amplification in both cases. Clinically, both cases had pseudomixoma peritonei and 1 had disease recurrence. For KRAS Sanger sequencing, conclusive results were obtained in 25 cases due to DNA quality issues. KRAS mutations were found in 10 samples (40%), and were associated with no recurrence (p=0.036). The TruSight Tumor 15 panel was possible only in 16 samples. All samples showed at least one mutation in one gene and the most mutated genes were: *TP53* and *KRAS* (10 mutations each), *BRAF* (4) and *HER2* and *PIK3CA* (1).

Conclusions We identified potential therapeutic targets in Brazilian mucinous adenocarcinoma of ovary that could be investigated in future new clinical trials. In addition, the presence of *KRAS* mutations was associated with better patient outcome.

IGCS19-0478

325 A CASE STUDY ON OVARY METASTATIC MELANOMA

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10.1136/ijgc-2019-IGCS.325

Objectives Melanoma accounts for 3% of skin neoplasms in Brazil, with an incidence of 1.7% in women in the year 2018, according to the National Institute of Cancer. It can appear in any part of the body, but the skin is the primary site in 90% of cases. In 2–3% of the cases, the primary site is unknown. In this context, the objective is to present a rare case of ovary metastatic melanoma.

Methods We present a case report of a 36-year-old patient who underwent bilateral oophoroplasty and tubo-ovarian abscess drainage due to an acute inflammatory abdomen. Initially anatomopathological results of ovary dysgerminoma showed a 11 cm tumor with approximately 10% tumor necrosis and index mitotic 6/10. Histopathology study showed a superficial spreading melanoma, while immunohistochemistry discrimination was positive for S100, HMB-45, and Melan-A.

Results The case evolved with right inguinal lesion and bilateral adnexal tumors. Positron emission tomography showed multiple peritoneal implants, metastatic lesions in the lumen