

regulation seems to have a role in the pathogenesis of different tumors including gastric and pancreatic cancers.

Our aim to investigate the involvement of *SOCS3* gene in EOC by monitoring its expression in ovarian cancer cell lines and EOC tissue samples, then to compare results to normal ovarian tissue samples. We also examine methylation status of both, ovarian cell lines and ovarian tissue specimen.

**Methods** Real time qPCR was used to assess gene expression using Taq Man gene expression assay. Five cell lines (MCAS, OVSAHO, OV 2008, A2780s and A2780cp) and 19 tissue samples with different histopathology types (6 normal, 4 benign, 5 borderlines and 4 high grade serous) were examined. Methylation status analysis was performed by methylation specific PCR

**Results** OVSAHO, OV2008 and A2780s cell lines showed down regulation of *SOCS3* expression when compared to normal. Benign, borderline and high grades samples, displayed also significant down regulation of *SOCS3* expression. Analysis of methylation pattern showed no hyper-methylation in both cell lines and tissues.

**Conclusions** Down regulation of *SOCS3* gene expression was detected in ovarian cancer cell lines and EOC tissue samples, suggesting a putative role of *SOCS3* in the pathogenesis of EOC. Other epigenetics mechanisms such as micro-RNAs are involved in the regulation of *SOCS3* expression in addition to hyper-methylation and therefore, further study is needed to uncover these mechanisms.

## IGCS19-0617

### 272 CYTOREDUCTIVE SURGERY PLUS HYPERTHERMIC INTRAPERITONEAL CHEMOTHERAPY FOR THE MANAGEMENT OF PERITONEAL CARCINOMATOSIS FROM OVARIAN CANCER: A PRELIMINARY SINGLE-CENTER EXPERIENCE FROM SAUDI ARABIA

I Al-Badawi\*. *King Faisal Specialist Hospital and Research Center, Obstetrics and Gynecology, Riyadh, Saudi Arabia*

10.1136/ijgc-2019-IGCS.272

**Objectives** To report our preliminary single-center experience with cytoreductive surgery (CRS) plus hyperthermic intraperitoneal chemotherapy (HIPEC) in the management of peritoneal carcinomatosis (PC) arising from ovarian cancer.

**Methods** From 2016–2018, 23 patients underwent CRS +HIPEC. CRS was performed with standard peritonectomy procedures and visceral resections directed toward complete elimination of tumors. HIPEC was performed with either cisplatin (50 mg/m<sup>2</sup>) plus doxorubicin (15 mg/m<sup>2</sup>), or single-agent cisplatin (100 mg/m<sup>2</sup>), and allowed to circulate in the abdominopelvic cavity for 90 min at 41.0–42.2°C.

**Results** Almost all PC cases were primary disease presentations (61.9%) and had high-grade papillary serous histology (90.5%). Cytoreduction completeness (CC-0/1) was achieved in all patients with a median peritoneal cancer index (PCI) of 12±6.3 (range: 3–30). Combination cisplatin+doxorubicin HIPEC chemotherapy was used in 14 patients (66.7%). The median estimated blood loss and hospital stay were 1200 ±350 mL (range: 800–4500) and 14±5.7 days (range: 8–47), respectively. Major postoperative Clavien-Dindo grade III/IV complications occurred in 3 patients (14.3%), and none developed HIPEC chemotherapy-related toxicities. The median

overall survival (OS) and disease-free survival (DFS) after CRS +HIPEC were 18±2.4 and 9.8±3.2 months, respectively. The median follow-up time was 13 months (range: 8–42). In a univariate analysis, patients with CC-0, <12 PCI score and primary PS presentation had statistically higher median 5-year DFS and OS (P<0.05). In a multivariate analysis, CC-0 was shown to be an independent significant prognostic factor for OS (P<0.05).

**Conclusions** CRS+HIPEC appears to be feasible, safe, and yields survival oncological benefits in patients with PS originating from ovarian cancer.

## IGCS19-0700

### 273 MIXED GERM TUMOR WITH YOLK SAC TUMOR AND MATURE TERATOMA – CASE REPORT AND LITERATURE REVIEW

<sup>1</sup>K Almeida\*, <sup>2</sup>G Carvalho G- Carvalho, <sup>1</sup>JL Bravin JL- Bravin, <sup>3</sup>MIPDS Vianna MIPDS- Vianna, <sup>1</sup>VHDS Vicuna VHS- Vicuna, <sup>1</sup>IC Menezes IC- Menezes, <sup>1</sup>VD Santana VD- Santana. <sup>1</sup>Instituto Nacional do Cancer INCA, Oncological Surgery – Resident, Rio de Janeiro, Brazil; <sup>2</sup>Instituto Nacional do Cancer INCA, Oncological Surgery, Rio de Janeiro, Brazil; <sup>3</sup>Instituto Nacional do Cancer INCA, Pathologist, Rio de Janeiro, Brazil

10.1136/ijgc-2019-IGCS.273

**Objectives** This study aims to report a case of mixed germ cell tumor in patients treated at the National Cancer Institute (INCA) in the city of Rio de Janeiro - Brazil

**Methods** Physical record review and literature review.

**Results** Germ cell tumors are rare and have highly malignant subtypes, such as the endodermal sinus tumor. In the present case: a female patient, 18 years old, referred to INCA after being submitted to surgical excision in another hospital, an initial diagnosis of stage IV ovary embryonal carcinoma. After evaluation, chemotherapy (BEP - bleomycin, etoposide and cisplatin) was chosen. In spite of the systemic treatment, the lesions progressed leading to patient clinical worsening (decrease of the general state and increase in ascites). Discussed case in clinical meeting and deliberate surgical rescue. 26/02/2019: Pelvic mass resection with approximately 30 kg, right annexectomy and resection of satellite lesions in the pelvis, peri-splenic, omentum and hepatic nodulectomy of 3.5 cm in segment VII. The freezing biopsy found mucinous neoplasia



Abstract 273 Figure 1

related to teratoma. The definitive diagnosis was of mixed germ tumor with endodermal sinus tumor and mature teratoma.

**Conclusions** The standard treatment for advanced stages for this neoplasm is surgery followed by adjuvant chemotherapy, but in relapses treatment is still controversial. This case reflects the difficult decision between clinical and surgical treatment in rare and selected cases.

## IGCS19-0660

274

### MALIGNANT GERM CELL TUMORS PATIENTS BETWEEN 14 – 39 YEARS, A 3 DECADES EXPERIENCE IN A PUBLIC HOSPITAL 1985 – 2015 SAN BORJA ARRIARAN HOSPITAL

<sup>1</sup>R Altamirano\*, <sup>1</sup>O Nazzal, <sup>1</sup>E Suarez, <sup>2</sup>P Acosta. <sup>1</sup>Hospital San Borja Arriaran, Unidad de Ginecología Oncológica, Santiago, Chile; <sup>2</sup>Hospital San Borja Arriaran, Unidad de Ginecología, Santiago, Chile

10.1136/ijgc-2019-IGCS.274

**Objectives** Describe malignant germ cell tumors of the ovary in patients, between 1985 - 2015 at San Borja Arriaran Hospital (HCSBA) in Santiago, Chile. HCSBA is a public institution that covers about 20% of the Chilean capital population.

**Methods** Retrospective search in the gynecology oncology and pathology HCSBA units data bases of the following parameters; histology type and age of initial diagnostic. We found a total of 19 records of female patients with malignant germ cell tumors between 14–39 years, that were reviewed and analyzed by 3 members of our unit.

**Results** The most frequent histology was dysgerminoma (58%), followed by Immature teratoma (21%), mixed germ cell tumors (16%) and yolk sac tumor (5%). 53% of our cases were in patients between 14–20 years old and only 16% older than 30 years.

**Conclusions** Our findings were similar as those founded in the international literature in prevalence and age related incidence, but we found an increased incidence in Dysgerminoma. We are unable to analyze treatments, because of the variation in the last 3 decades. We can agree that overall survival was related with early stage diagnostic and improved in the last 20 years with the incorporation of adequate chemotherapy, surgical staging and precise pathology techniques.

## IGCS19-0695

275

### MALIGNANT OVARIAN TUMORS IN PATIENTS 14 – 20 YEARS, A 3 DECADES EXPERIENCE IN A PUBLIC HOSPITAL 1985 – 2015 SAN BORJA ARRIARAN HOSPITAL

R Altamirano\*, O Nazzal, E Suarez, P Acosta. Hospital San Borja Arriaran, Unidad de Ginecología Oncológica, Santiago, Chile

10.1136/ijgc-2019-IGCS.275

**Objectives** Describe malignant ovarian tumors in patients 14 - 20 years, between 1985 - 2015 at San Borja Arriaran Hospital

(HCSBA) in Santiago, Chile. HCSBA is a public institution that covers about 20% of the Chilean capital population.

**Methods** Retrospective search in the gynecology oncology and pathology HCSBA units data bases of the following parameters; histology type and age of initial diagnostic. We found a total of 20 records of female patients with malignant germ cell tumors between 14–20 years, that were reviewed and analyzed by 3 members of our unit.

**Results** The most frequent histology was germinal tumors (50%) followed by epithelial (40%). The most frequent germinal tumor was dysgerminoma (60%) followed by yolk sac tumor (20%), and immature teratoma (20%). The most common epithelial tumor was mucinous borderline (38%) followed by serous adenocarcinoma (38%) and serous borderline (25%). There were only 2 cases of stromal cancer. 85% of the tumors were early FIGO stage; 60% IA and 25% IC. The median age of diagnostic was 17,5 years.

**Conclusions** Our findings were similar as those founded in the international literature in prevalence and age related incidence in tumors under 20 years. It is important to establish histologic type and stage to plan a proper conservative surgery and medical treatment

## IGCS19-0652

276

### MALONDIALDEHYDE AND VEGF ARE SEROLOGIC PROGNOSTIC FACTORS AND PREDICT RESISTANCE TO PLATINUM SALTS

R Anghel\*, O Trifanescu. Alexandru Trestioreanu Bucharest Institute of Oncology, Radiotherapy II, Bucharest, Romania

10.1136/ijgc-2019-IGCS.276

**Objectives** Introduction: Ovarian cancer is worldwide the second cause of gynaecological cancer but the commonest cause of gynaecological cancer-associated death. The aims of this study were to determine new serologic prognostic factors and predictive factors for platinum response.

**Methods** Forty-five patients diagnosed with epithelial ovarian carcinoma stage II-IV between 2010 and 2018, who underwent multimodality treatment (surgery and chemotherapy) were included in the study. Malondialdehyde, a final product of lipid peroxidation as a marker of oxidative stress and VEGF as a marker of angiogenesis were determined before each cycle of chemotherapy.

**Results** There was an increase in the value of lipid peroxidation, malondialdehyde mean value was 8.2  $\mu\text{mol}/100\text{ mL}$  (normal value 4  $\mu\text{mol}/100\text{ mL}$ ). Malondialdehyde was a prognostic value, elevated levels more than 8  $\mu\text{mol}/100\text{ mL}$  were associated with a smaller progression free survival, (HR=2.904, 95% CI 2.2–3.8, p=0.0001) Malondialdehyde predicted resistance to platinum salts and the cut-off value with 80% sensibility was 7.7  $\mu\text{mol}/100\text{ mL}$ . VEGF levels were elevated too, mean levels were 1020 pg/mL, normal values <750 pg/mL. There was a strong correlation between malondialdehyde and VEGF (Pearson correlation coefficient was 0.38, p=0.03. VEGF had a prognostic role, patients with elevated VEGF levels had a significant lower progression free survival (HR=2.6, 95% CI 1.7–3.9, p=0.001). VEGF elevated levels correctly predicted platinum resistance and the cut-off value with 80% sensibility and specificity was 1085 pg/mL.