

of cancer tissues from these patients showed a mixed cytoplasmic and membrane expression of PD-L1 in a varying percentage of cancer cells: 6/17 (35.3%) were negative, 4/17 (23.5%) showed reactivity in 20–50% and 7/17 (41.2%) in 60–90% of cancer cells. PD-L1 was also expressed in the tumour-associated lymphocytes and macrophages in 10/17 (58.8%) cases. Stroma PD-L1 expression was not related to cancer cell expression. There was no statistical difference in the concentration of sPD-L1 between the groups of patients with negative, low or high cancer cell PD-L1 expression.

Conclusion: Aside from cancer cells, immune infiltrating cells may be involved in the immune suppression characterizing a subset of ovarian cancer patients. The presence of high PD-L1 amounts in the plasma of patients may also neutralize anti-PD-L1 antibody therapies. The optimal biomarkers for the administration of therapeutic anti-PD-L1/PD1 antibodies remains a subject for investigation.

PS-04-037

Incidental gonadal germ cell tumours at the time of prophylactic gonadectomy in patients with Swyer syndrome - a report of 3 cases N. Basheska*, B. Ognenoska-Jankovska, S. Veljanoska, D. Plaseska-Karanfilska

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Background & Objective: Swyer syndrome (46,XY pure gonadal dysgenesis) is an uncommonly encountered condition in which gonadectomy is recommended upon diagnosis due to a significant risk of malignant transformation of the dysgenetic gonads. The aim of this study was to present our experience with incidentally found germ cell tumours in patients with Swyer syndrome.

Method: We report the clinico-pathological characteristics of 3 cases of female phenotypic patients presenting with primary amenorrhea who underwent prophylactic bilateral laparoscopic gonadectomy with salpingectomy following a diagnosis of Swyer syndrome. At the time of diagnosis, they were 17 to 20 years old. The presenting features were hypogonadotropic hypogonadism and 46, XY karyotype. A hypoplastic uterus with normal looking fallopian tubes and bilateral gonads were detected by ultrasonography and confirmed during laparoscopy. The patients with dysgerminoma underwent postoperative chemotherapy. All three patients are alive and well 70, 115 and 144 months following surgery.

Results: The histopathological examination of the streak gonads which were completely sampled and embedded revealed the presence of bilateral predominantly “burnt out” gonadoblastoma in all patients. In addition, in two patients, a coexisting dysgerminoma of 1.5 and 3.8 cm in diameter FIGO stage IC1 in the right gonad was confirmed. The sequencing of the SRY gene of the patient with bilateral gonadoblastoma without dysgerminoma overgrowth revealed a C/G substitution at the first nucleotide of codon 133, leading to Arg/Gly replacement in the SRY protein.

Conclusion: Our data suggest that patients with gonadal dysgenesis and 46, XY karyotype should be referred for bilateral gonadectomy and their operative specimens should undergo meticulous histopathological examination because of the high risk of neoplastic transformation.

PS-04-038

A clinicopathologic study of early stage placental mesenchymal dysplasia

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Background & Objective: To elucidate clinicopathologic features of early stage placental mesenchymal dysplasia (PMD).

Method: Ten cases of PMD with gestational age less than 20 weeks were clinicopathologically analyzed with an immunohistochemical study of p57 (Kip2) (p57).

Results: Maternal ages ranged from 23 to 40 years. Five patients were initially diagnosed as partial partial mole (PM) and one was as complete mole (CM) with twin on ultrasound examination. The gestational periods ranged from 12 to 19 weeks. One case was associated with Beckwith-Wiedemann syndrome. Histologically, early stage PMD was characterized by moderate swelling of stem villi with cistern formation, myxoid change, dilated veins, mild stromal cell proliferations, and the absence of trophoblastic hyperplasia. Dilated subchorionic vascular vessels with or without luminal thrombosis, or chorangioma, which were observed in the third trimester PMD, were not found. Regarding p57, villous stromal cells were diffusely positive in 3 cases, focally positive in 5, and uniformly negative in 2.

Conclusion: Early stage PMD can be clinically or pathologically misdiagnosed as abortion, PM, or CM with a twin. Histologic features in early stage PMD are less distinctive compared with those of PMD in the third trimester. The diagnostic clues are moderate swelling of stem villi with cistern formation, myxoid change, dilated veins, and mild stromal cell proliferations and the absence of trophoblastic hyperplasia. The p57 immunohistochemical study may be useful for differential diagnoses in equivocal cases. It is important to identify PMD cases in early stage to choose appropriate treatments.

PS-04-039

E-cadherin expression in high grade serous ovarian carcinoma – clinicopathological study

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Background & Objective: E-cadherin is epithelial cell adhesion molecule, which has been downregulated in various malignant epithelial neoplasms. We aimed to evaluate its expression in high grade ovarian serous carcinomas (HGOSC) of advanced stage.

Method: We analysed immunohistochemical expression of E-cadherin and compared it to multiple clinicopathological data and overall survival in 76 cases of HGOSC in advanced stage (FIGO III-IV). Presence of signal, its distribution (membranous and/or cytoplasmic), percentage of positive tumour cells and intensity of staining (mild, moderate and strong) were evaluated.

Results: The mean age of the patients was 58,74 years (24-78), with the majority (56,6%) in stage IIIC, 28,9% in stage IIIB, 10,5% in stage IIIA and 3,9% in stage IV. The mean post-operative survival period was 35,36 months (1-90 months). Immunohistochemical analyses showed membranous and/or cytoplasmic localisation of E-cadherin in all cases. In 68 cases (89,5%) more than 10% of the tumour cells were positive, and in the reminding 8 cases (10,5%) the positivity was present in less than 10% of the tumour cells. We observed heterogeneous intensity of the signal, with dominant strong signal in most of the cases (68,4%), moderate in 25% cases and mild signal intensity in 6,6% of the cases. The statistical analysis showed that both low intensity of signal and expression in less than 10% of the tumour cells were associated with shorter overall survival in patients (Kaplan-Meier, p<0.001).

Conclusion: The study shows that the decreased E-cadherin expression in tumour cells of HGOSC is associated to adverse prognosis, making it a potential prognostic marker.

PS-04-040

Pure primary squamous cell carcinoma of the ovary

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Background & Objective: We present a case of pure primary Squamous Cell Carcinoma of the Ovary (SCCO). Pure primary SCCO is a very rare tumour with less than 40 reports in the English literature.