

fibrotic tissue with pseudoaxanthoma cells and a few residual stromal cells [CD10 (+)] were considered as strong evidence of endometriosis—“presumptive endometriosis”.

Conclusion: Endometriosis might be viewed as a precursor lesion of endometrioid and clear cell carcinoma of the ovary, via intermediary atypical borderline lesions.

PS-22-022

Cell cycle markers and hormone therapeutic targets in uterine smooth muscle tumors, an immunohistochemical approach

N. Santonja Lopez*, S. Navarro Fos

*Pathology-Manises Hospital, Labco, Valencia, Spain

Objective: To analyse the immunohistochemical expression of some cell cycle markers and hormone therapeutic targets in uterine muscle neoplasm.

Method: Four tissue microarrays (TMA) were constructed including 29 leiomyomas, 33 special leiomyomas, 16 leiomyosarcomas, and 13 no neoplastic adult uterus myometrium. 4 µm-thick sections were obtained for H/E staining as well as for several immunohistochemical staining: p53 (DAKO), p16 (CINTEC), p21 (DAKO), and estrogen and progesterone receptors (NOVACASTRA).

Results: We observed a significant correlation ($p < 0.005$) between the protein expression and the pathological diagnosis. P53 was expressed only in leiomyosarcomas, whereas p16 and p21 were more frequently expressed in leiomyosarcomas, being focal in leiomyomas. There was also a correlation with hormone receptor; both estrogen and progesterone were more frequently expressed in leiomyomas.

Conclusion: Immunohistochemical expression of cell cycle proteins is useful for diagnostic and prognostic in leiomyosarcomas, whereas hormone receptors do not seem as useful for treatment like they are in benign counterparts.

PS-22-023

A rare case of vulvar malignant fibrous histiocytoma/pleomorphic sarcoma

E. Moustou*, K. Manoloudaki, E. Arkoumani, A. Tsavari, K. Koulia, D. Myoteri

*General Hospital Tzaneio, Dept. of Pathology, Piraeus, Greece

Objective: Primary sarcomas of the vulva comprise a rare group of malignant neoplasms consisting 1,5–3 % of all vulvar malignancies. However, Malignant Fibrous Histiocytoma (MFH) is the second most frequent sarcoma of this region.

Method: We report a case of a 73 year old woman with a polypoid ulcerated tumor in the labium major, measuring 7,5×6×4,5 cm.

Results: Grossly, the tumor was multilobulated, firm or soft-elastic and gray white or reddish in color. Histologically, showed a high-grade cytologic features of spindle, pleomorphic and multinucleated cells in a storiform, fascicular and diffuse pattern, high atypical mitotic rate, fibromyxoid stroma, necrosis, hemorrhage and an inflammatory infiltrate. Immunoreactivity was positive for vimentin, CD68/kp1,a1-antitrypsin NSE and P16, focal for SMA, CD10 myoglobin, rare for S100p and negative for cytokeratins EMA, CD34 as well as the rest of myoid, neurogenic, vascular, lymphoid, and melanocytic markers. According to the morphology and immunohistochemistry (lack of any lineage specific marker) and after excluded other pleomorphic malignancies, a diagnosis of MFH/pleomorphic sarcoma was decided.

Conclusion: MFH arising in the vulva is rare with a few reference in literature. The diagnosis is one of exclusion and presuppose excellent tumor sampling, current microscopic evaluation and appropriate use of immunohistochemistry.

PS-22-024

Clinicopathological and immunohistochemical analysis of 23 cases of ovarian cellular fibroma

N. Basheska*, B. Ognenoska-Jankovska

*UCRO, Faculty of Medicine, Dept. of Histopathology, Skopje, Macedonia

Objective: To define clinicopathological characteristics and immunohistochemical markers helpful in differentiating between cellular fibroma (CF) and mitotically active cellular fibroma (MACF).

Method: Patient records and archival pathology specimens of 23 ovarian cellular fibromas diagnosed and followed between 2000 and 2012, were reviewed and immunohistochemistry was performed.

Results: The mean age of patients with CF ($n=15$) and MACF ($n=8$) was 55 and 37 years, respectively. All tumours were unilateral, with a mean tumour size of 8.6 cm for CFs and 12.9 cm for MACFs. In all tumours, most of the cells showed mild or moderate nuclear atypia. The mean highest mitotic count was 2.0 MFs/10 HPFs for CF, and 7.2 MFs/10 HPFs for MACFs. The majority of the tumours were immunoreactive for vimentin, alpha-SMA, WT-1, inhibin-alpha, calretinin, CD56, melan-A, PR, and bcl-2, and negative for pan-cytokeratin, EMA, CD117, ER, and p53. A few tumours were also positive for S100, desmin, CD10, and CD99. In addition, the MIB-1 labeling index (LI) in MACFs was higher (mean 16.9 %, range 12–25 %), than that in CFs (mean 5.9 %, range 3–9 %).

Conclusion: Our results confirm the clinicopathological differences and the immunophenotypic similarity between ovarian fibromas and cellular fibromas, and suggest that the use of MIB-1 LI may help in differentiating between CF and MACF.

PS-22-025

HR HPV in situ hybridization, p 16 INK 4A and survivin expressions in uterine cervix carcinomas and the evaluation of these expressions with prognostic factors

E. Kimiloglu*, F. Demir, Y. T. Ayanoglu, N. Erdogan

*Taksim's Hospital, Dept. of Pathology, Istanbul, Turkey

Objective: Cervix Carcinoma(CC) is one of the most important health problems of women in developing countries. CC is the second most common carcinoma of women in the world. Because of the proved effect of the load of the disease, efficient screening and early therapy programmes, the disease has been one of the vital area of action.

Method: We studied 44 cases of cervical intraepithelial neoplasms(CIN), 9 cases of squamous carcinomas(SCC). Hr HPV DNA ISH, p16 INK 4A and survivin immunohistochemical expressions were analysed in these 53 cases.

Results: We determined that the presence, density and the nuclear detection form of Hr HPV DNA had a diagnostic and prognostic importance in CIN and CCs($p < 0.05$). Positive staining of p16 and survivin signalled progressive oncogenic events, therefore p16 and survivin were persistent HPV infection markers ($p < 0.001$ for p16) and ($p < 0.01$ for survivin). The episomal pattern which is nonassociated guest of HrHPV DNA with the host cell DNA signalled early HPV infection ($p < 0.001$). When it integrated the host cell DNA, especially if the density and widespread of HPV DNA increase, this signals persistent HPV infection($p < 0.001$).

Conclusion: With the light of these findings we determined that in CIN I lesions, HPV is infectious, in CIN II-CIN III lesions, HPV is neoplastic.

PS-22-026

Morphological characteristics of ovaries in case of different kinds of surgical treatment

O. Reshetnikova*, V. Simrok, O. Teleshova, D. Simrok-Starcheva

*State Medical University, Lugansk, Ukraine

Objective: Polycystic ovarian syndromes (PCOS) are found in 5–10 % of women of reproductive age. In 60–75 % the ovarian pathology results in endocrine infertility. Surgical treatment of PCOS is one of the most important methods of treatment. Therefore, there is a need in study of less traumatic ways of surgical technique in gynecology.

Method: Twenty of ovaries were studied morphologically. Ten samples experienced the exposure to holmium laser (main group) and other thermo cauterization (group of comparison). Tissue samples were immersion fixed in 10 % buffered formalin solution, embedded in paraffin wax. Histological slides were studied microscopically; computer morphometry