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Abstracts



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often difficult to determine with certainty the exact site of origin of paratesticular tumours. However, it is thought that PL originates from testicular tunica, spermatic cord, epididymis, dartos muscle and subcutaneous tissue of scrotum.

Method: We report a case of a 18-year-old man with an unremarkable medical history who presented to our institution with left testicular pain and swelling. Ultrasound image revealed a highly vascularized neoplasm and the patient was subjected to radical orchiectomy.

Results: Histologically, the tumor was diagnosed as a grade 2 (Federation Nationale des Centres de Lutte Contre le Cancer), well-differentiated PL, with high mitotic activity, focal necrosis and mild or absent cytological atypia. The patient underwent adjuvant chemotherapy and radiotherapy. On follow-up, several pulmonary and retroperitoneal masses were detected and the patient died 16 months after initial diagnosis.

Conclusion: PL have an extremely variable prognosis, with a wide spectrum of behavior. Histologic grading, based on the evaluation of necrosis, mitotic activity and degree of differentiation, provides useful prognostic information. Although most examples are low-grade, high-grade lesions are aggressive and develop distant metastasis, albeit aggressive systemic therapy.

PS-25-067

Osseous metaplasia of the urinary bladder

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Objective: Bone formation outside the human skeleton is a well-known process; it is however rare in the urinary tract. Animal experiments have shown that osseous metaplasia of the urothelium may be due to ischemia, inflammation, necrosis, sclerosis and trauma. Even though the urothelium is known to have osteoinductive properties in animals, osseous metaplasia is seldom seen in humans.

Method: A 77 years old male patient admitted to our hospital with macroscopic hematuria. An exophytic lesion was found and excised during cystoscopy. A 0.6 cm specimen was sent to our department.

Results: Histopathologic examination revealed ulceration of the urothelial surface with inflammatory granulation tissue formation, as well as foci of metaplastic ossification embedded in the lamina propria. The reserved urothelium exhibited reactive atypia.

Conclusion: The changes observed in the bladder wall could be explained as the result of chronic inflammation. The latter leads to the release of cytokines and growth factors, and may induce the formation of metaplastic bone.

PS-25-068

The effect of testosterone on angiogenesis in prepuce and urethral plate tissue in hypospadias

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Objective: To study the effect of testosterone in healing process after hypospadias surgery.

Method: Fifteen boys mean age 3.2 years old, with penoscrotal hypospadias underwent urethroplasty. In 8 pts (group A) testosterone was given i.m. preoperatively. The rest (group B) underwent hypospadias repair without androgens stimulation. Intraoperatively, tissues samples were taken from prepuce (PR) and urethral plate (UP). Immunohistochemistry was applied using anti-CD31, anti-VEGF, anti-MMP2 and anti-MMP9 antibodies.

Results: PR: Microvessel count was positively related to the intensity of immunoeexpression of MMP-2 positive cells ($p=0.041$) and MMP-9 positive vessels ($p=0.038$) and negatively related to the stromal immunoeexpression of VEGF ($p=0.016$) and MMP-2 ($p=0.044$), the number of MMP-9 positive

cells ($p=0.027$) and the intensity of immunoeexpression of MMP-9 positive cells ($p=0.027$). UP: Microvessel count was positively related to the number of MMP-9 positive cells ($p=0.005$) and negatively related to the stromal immunoeexpression of VEGF ($p=0.015$). Regarding testosterone, the number of MMP-9 positive cells in PR samples was higher in group A than in group B ($p=0.010$).

Conclusion: It seems that angiogenesis induced by VEGF, MMP-2 and MMP-9 is more apparent in PR samples. Testosterone, possibly via up regulating MMP-9, may affect this process.

PS-25-069

Age influence in BBN induced urothelial lesions in ICR male mice

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Objective: To study the influence of age on BBN induced urothelial lesions in ICR male mice.

Method: 42 ICR male mice were divided in four groups. Group I and III were subjected to BBN's action (12 weeks) at different ages (I: 5 weeks old; III: 18 weeks old). Group II and IV (control groups), didn't receive BBN (drunk only tap water).

Results: All animals subjected to BBN, developed urothelial lesions, in higher percentage in the younger group (I). The spectrum of urothelial lesions identified were: simple hyperplasia (I: 67 %; III: 50 %); nodular hyperplasia (I: 58.3 %; III: 30 %); dysplasia (I: 100 %; III: 70 %); carcinoma in situ (I: 3 %; III: 0 %), invasive carcinoma (I: 33 %; III: 20 %) and epidermoid metaplasia (I: 67 %; III: 60 %).

Conclusion: Age-related decline in physiological functions, are likely to put older individuals at increased risk for tumorigenesis. This study suggests resistance to BBN in older animals, when the most frequent experimental conditions are applied.

PS-25-070

Quantitative measurements of cell density and proliferative marker (Ki-67) by image analysis of renal cell carcinoma

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Objective: We analyzed a total number of tumor cells in renal cell carcinoma and proliferative activity (% Ki67-positive cells) to establish absolute quantity of tumor cells per sq.mm per histological slide and relates this measure with proliferation.

Method: The study included 45 patients diagnosed with RCC. After whole slide scanning by the Mirax scanner (3DHitech, Budapest) of Ki67 stained slides, we located the areas within the tumors with maximal ki67 levels and calculated the precise quantity of tumor cells per sq.mm, which was the sum of negative and Ki67 positive cells. Morphometric analysis was performed using the Panoramic Viewer software (3DHitech, Budapest). For each case we analyzed a total number of tumor cells in a 1 mm² sample of Ki67 was evident in at least 10 fields of view.

Results: Mean tumor cells in 1 mm² of histology slide was 4,389 ±cr- 229 cells, only 11.62±/-1.65 % were positive for Ki67. There was no correlation between cell density and Ki67 $r=0,005$ ($p=0,0032$)

Conclusion: By analysis of RCC, was established the total quantity of tumor cells per mm² and found no correlation between cell density and proliferation.

PS-25-071

Ki-67 labeling index evaluation in urothelial bladder carcinoma

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