PRIMARY CUTANEOUS MENINGIOMA OF THE SCALP: CASE REPORT

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Meningiomas arise from the meninges of the brain or spinal cord. They are the most common tumors of the central nervous system (CNS). Cutaneous meningiomas are rare tumors. Most of them occur in the head and neck. Several theories exist to explain their histogenesis. Lopez et al. have postulated classification of cutaneous meningiomas based on simple clinical and pathological features. Three different types are described. Type I have benign behavior and are localized in the skin of the scalp, forehead and para-vertebral areas. Type II are meningiomas of the soft tissue with extension to the skin, have a less favorable prognosis and usually are situated in periorbital, perineural and periauricular soft tissue. Type III are meningiomas of the CNS with extension to the skin, with dismal prognosis. We present a case of primary cutaneous meningioma in a 39-year-old man with a history of myasthenia gravis. Physical examination revealed a subcutaneous, firm, painless lump of the left parietal scalp. Computed tomography showed a homogeneous well-delineated soft tissue mass, without bone or intracranial invasion and communication between the tumor and subdural space. The mass was excised. Grossly, the tumor measured 5 cm in greatest dimension, with a white, firm cut surface. Microscopically, it was composed of solid sheets and strands of meningothelial cells embedded in dense collagenous tissue, without atypia, mitoses or necrosis. Psammoma bodies were present. In our patient, the tumor was classified as a type II. Immunohistochemical staining showed positive expression for epithelial membrane antigen, vimentin and negative for smooth muscle actin, cytokeratins (CKAE1/AE3, CK20), chromogranin, desmin, sarcomeric actin, NSE, S100, CD68, GFAP, CD34, CD31 and HMB45. The patient did not show any sign of recurrence one year after the procedure. Cutaneous meningiomas are microscopically and immunohistochemically identical to their meningeal counterparts. Extracranial cutaneous meningiomas should be considered on differential diagnosis of unusual scalp lesions. The diagnosis is based on histologic and immunohistologic examination confirming the meningothelial origin of the neoplastic cell population.

MOSAIC MORPHOLOGY OF LEYDIG CELLS IN INFERTILE PATIENTS WITH NON-OBSTUCTIVE AZOOSPERMIA

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One of the most severe forms of male infertility is non-obstructive azoospermia (NOA). NOA is frequently characterized by heavy damage to seminiferous tubules that has already been described in the literature. Much less is known about changes of Leydig cells. The hypothesis of this study is based on the assumption that Leydig cells in patients with NOA are significantly different (damaged) from the same type of cells in the control group. Therefore, the aim of the current survey was to investigate Leydig cells in two groups (control and the group of infertile men with NOA) by use of qualitative and quantitative histologic methods and immunohistochemistry (the expression of testosterone in situ). In addition, blood levels of gonadotropins and testosterone were determined. Results of qualitative histologic analysis showed a kind of a ‘mosaic’ picture of regular and irregular Leydig cells in NOA cases. Quantitative histologic analysis indicated a significantly lower number of testosterone-producing cells. NOA patients also had significantly lower testis volume and status of spermatogenesis when compared to controls. The results of the study pointed out that the patients with NOA could suffer from a deficit of androgens as well as from premature andropause.