

## A rare case of well differentiated papillary mesothelioma associated with appendix testis in a routine hydrocele

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**Introduction & Objectives:** The mesothelium lining of the tunica vaginalis can undergo various proliferative changes including reactive mesothelial hyperplasia, adenomatoid tumor, malignant mesothelioma or well-differentiated papillary mesothelioma, as in the current case. Less than 30 cases have been documented so far, and it proved to have an indolent behavior.

**Materials & Methods:** A 65 year-old man was admitted to the hospital due to scrotal enlargement. Following the clinical and ultrasonography examinations, an orchiectomy was performed. The surgical specimen, measuring 18x6.5x5.4 cm, showed cystic change on cut section, filled with clear, pale yellow liquid and multiple prominent areas, the largest one of 3.8x2.7 cm, surrounded by a thin rim of testicular parenchyma. Thoroughly microscopic evaluation of the solid protruding areas revealed a papillary architecture, lined by cuboidal mesothelial cells, small tubules and scattered stromal spindle cells, with minimal atypia and no mitotic activity. Other thickened areas of the tunica vaginalis showed chronic inflammation and foreign body granuloma (cholesterol clefts). Abutting the spermatic cord, a well delineated nodular lesion representing an appendix testis was identified. The remaining testicular parenchyma was atrophic. Ancillary immunohistochemistry tests were performed to confirm the diagnosis. The mesothelial papillary proliferation was positive for specific markers (WT1, calretinin, CK7) and displayed a low proliferative index (3-5%).

**Results:** In order to assess the diagnosis of a WDPM, one must exclude its malignant counterpart, the malignant mesothelioma, which has an aggressive behavior. Bland cytology, lack of necrosis and invasion in the adjacent structure favors a rather benign lesion. Hence, a systematic and meticulous pathologic examination is needed.

**Conclusions:** WDPM of the tunica vaginalis usually affects old men and is detected in a hydrocele, as in the presented case. Another peculiar and rare finding was the associated appendix testis seen herein. Surgical excision of the tumor is curative, with no recurrence reported at the moment.