Solid variant of alveolar rhabdomyosarcoma of the spermatic cord

A 20-year-old man visited the Department of Urology complaining of a painless lump in the region of the right testicle, which he noticed about four months ago. The lump did not change in size, since. The patient reported no recent trauma.

Physical examination revealed a firm, nodular palpable mass in the caudal region of the epididymis. Ultrasound revealed a heterogeneous sounded tumor formation, measuring up to 3 cm, in the projection of the right epididymis tail (left). Exploration of the right hemi-scrotal region was performed. All preoperative analyses, including chest x-ray and abdominal ultrasound were normal. A tumor formation holding to the beginning of the spermatic cord, close to the epididymis tail, with no signs of infiltration of the adjacent structures, was observed. The tumor was encapsulated and presumably completely resected. On cut surface it appeared nodular. The histopathology revealed diagnosis of alveolar rhabdomyosarcoma, solid variant. Lymph node involvement and systemic metastasis survey revealed no signs of metastasis, so the patient was considered clinical stage I [1].

A radical inguinal orchidectomy was performed, combined with chemotherapy (vincristine and dactinomycin) [2]. During the second surgery, macroscopically no residual tumor mass was found. The histopathological examination of the surgical specimen, on the contrary, revealed a residual tumor mass in the region of the spermatic cord, showing vascular invasion (right). The patient is now 24 months without any sign of disease.

Rhabdomyosarcomas tend to be palpable and in most patients present with painless scrotal swelling. They most often appear in the distal spermatic cord and are usually not encapsulated. Pure alveolar type is the least common and comprises only 1.7% of all paratesticular rhabdomyosarcomas [3].

As many authorities still recommend a routine lymph node dissection, the most appropriate approach to staging and treatment of these tumors seems controversial, especially regarding the stage I and vascular invasion.

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