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LETTER TO EDITOR Open Access

An extremely rare case of testicular malign neoplasm; alveolar subtype of rhabdomyosarcoma with long term follow-up

Dear Editor,

We would like to draw readers attention to testis tumours, notably rare ones in this letter. Yue et al. recently reported rare tumours in testis (1). However, subtypes of testicular tumours with their incidences are well-defined in published literature, some rare types of them could be reported by pathology (2). Overcome these issues, we would like to affix an extremely case of paratesicular alveolar rhabdomyosarcome. A handful of cases were published in literature and also most of them were including childhood series. A 23-year-old man was admitted to our urology outpatient clinic with main symptoms of right scrotum. In detailed physical examinations, there was a nodular mass with 6 cm diameter in upper part of right testis. Ultrasonography (US) revealed 6 × 5 × 4 cm and computed tomography (CT) showed an 11 × 9 mm parailiac lymph node. Radical orchiectomy was performed and pathology reported paratesticular alveolar rhabdoyosarcoma (Figure 1). He has no metastasis after 6 cycles of chemotherapy with vincristine, actinomycin, and cyclophosphamide. However, rare tumour can occur in testis, early diagnosis and adequate treatments can provide long-term survival without metastasis.

Paratesticular and testicular tumours usually occur in childhood and most of these have benign characteristics (3). They are originated from mesenchymal tissue of testis and spermatic cord. Besides these, paratesticular tumours may be felt like arising from testis during physical examinations, US is useful for differential diagnosis. Nevertheless, the exact diagnosis can be made by histopathology examinations. There were hyperchromatic nucleuses and spindle cytoplasmic cells with haematoxylin–eosin (Figure 1). Additionally actin, desmin, and myoglobulin were positive (Figure 1). Alveolar subtype was reported by pathology, in the present case.

Sarcomas consist of 1% of all malign tumours, and they are originated from embryonic tissues. The common sites of sarcomas are skeletal system. However, paratesticular rhabdomyosarcom is an extremely rare. Specifically, embryonic subtype of rhabdomyosarcoma were reported in literature (4). Subtypes can be diagnosed by pathology examinations. Alveolar subtype of rhabdomyosarcoma is an extremely entity for paratesticular tumours, as in our case. The main clinical sign of this tumour is painless scrotal mass. Weakness and tiredness with palpable lymph nodes in inguinal and abdominal area may come into question, in advanced stages. Radical orchiectomy, chemotherapy, and radiotherapy are the main parts of treatment. Our case had clinical stage 1 tumour with intermediate risk (5). Thus, he underwent chemotherapy for 6 cycles, after operation. He did not need radiotherapy. Chest x-ray, abdominal and pelvic CT has been used for follow-up. He has been in follow-up period for 7 years and he had no metastasis.

Differential diagnosis is an important entity for testicular and paratesticular masses. Surgery with adjuvant therapy options are used for contemporary

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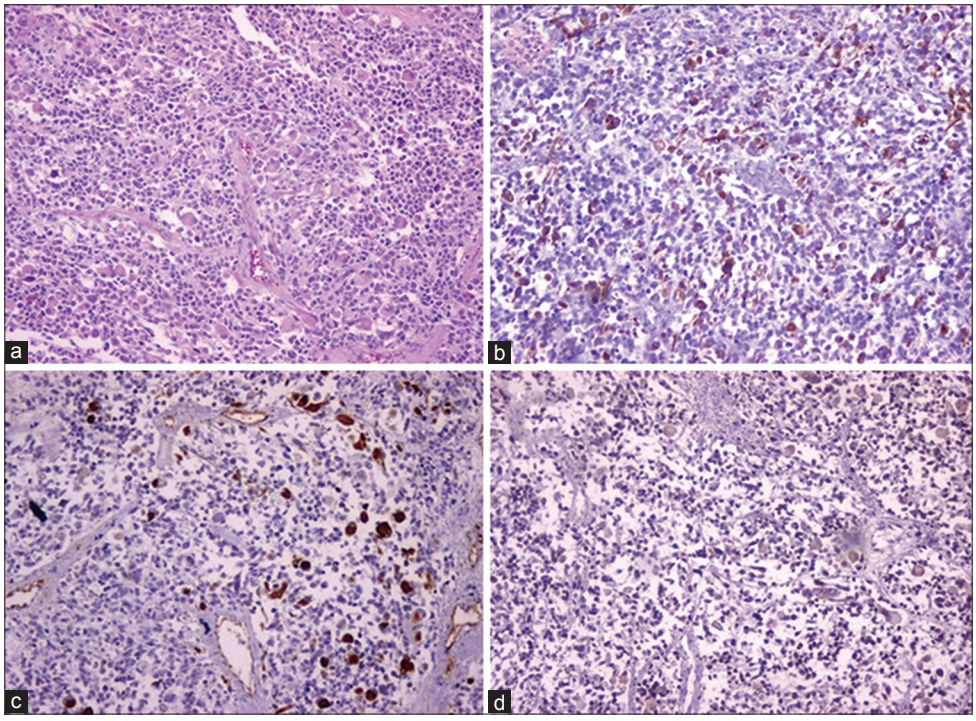

FIGURE 1. Histopathologic features of paratesticular alveolar subtype rhabdomyosarcoma (a) Tumour cells are seen with hyperchromatic nucleus and spindle eosinophilic cytoplasm. Alveolar subtype of rhabdomyosarcoma were presented with desquamated small, round, and poorly differentiated cells (HE.x10), (b) Tumour cells were positive with actin (x10), (c) Tumour cells were positive with desmin (x10), (d) Tumour cells were positive with myoglobulin (x10).

treatment. Long-survival can be provided by suitable treatment options with close follow-up.

Tumay Ipekci[1], Yigit Akin[2*], Burak Hoscan[1], Ahmet Tunckiran[1]

[1]Department of Urology, Baskent University Alanya Research Hospital, Alanya, Antalya, Turkey, [2]Department of Urology, Harran University School of Medicine, Sanliurfa, Turkey

*Corresponding author: Yigit Akin, M.D. Assistant Professor of Urology, Department of Urology, Harran University School of Medicine, 63100, Sanliurfa, Turkey. Tel: +90-506-533 49 99, Fax: +90-414-318 30 05. E-mail: yigitakin@yahoo.com

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