

Oncology

Leydig cell testicular tumors: About a case report

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1. Introduction

Leydig cell testicular tumors are rare tumors (1–3% of the total testicular tumors). But will be increasingly encountered due to more frequent exploration disorders of sexuality and fertility of men. They pose the problem of their biological non-palpable forms and the choice of their surgical treatment because of the difficulty in diagnosing benign and malignant forms.

2. Case report

52-year-old patient, epileptic, consulted for isolated left testicular pain since three months. On examination, the left testicle was the seat of a small lower polar nodule of approximately 1 cm in size. No other sign, including gynecomastia or swelling of superficial lymph nodes was observed. Tumor markers such as alpha-fetoprotein (AFP), β -human chorionic gonadotropin (β -HCG) and lactate dehydrogenase (LDH) were negative, and hormonal investigations were normal. A testicular ultrasound showed vascularized mass measuring 13 × 9 mm in left testicle (Fig. 1).

Abdominal and pelvis computed tomography (CT) scan was normal. Surgery was indicated. A radical right high orchiectomy was performed. Histology concluded to a Leydig cell tumor (Fig. 2). The Patient is regularly followed by our consultation, no local recurrence is detected after a 40-month follow-up. The blood tests including tumor markers and hormonal investigations were normal.

3. Discussion

Leydig cell tumors occur in about 75% of cases in adults. These rare tumors are in 90% of the benign cases, 10% are malignant. They are, together with tumors cells of Sertoli, of the group of tumors called “sexual cords and stroma”. Most often, the diagnosis is evoked by signs of hypogonadism: bilateral gynecomastia and often asymmetric, erectile dysfunction with often a drop in libido; infertility with oligo- or azoospermia, sometimes the discovery is fortuitous on ultrasound. Tumor markers AFP, HCG, LDH are normal. The hormonal evaluation of cell tumors Leydig should include testosterone (normal or low), 17-beta-estradiol (Normal or

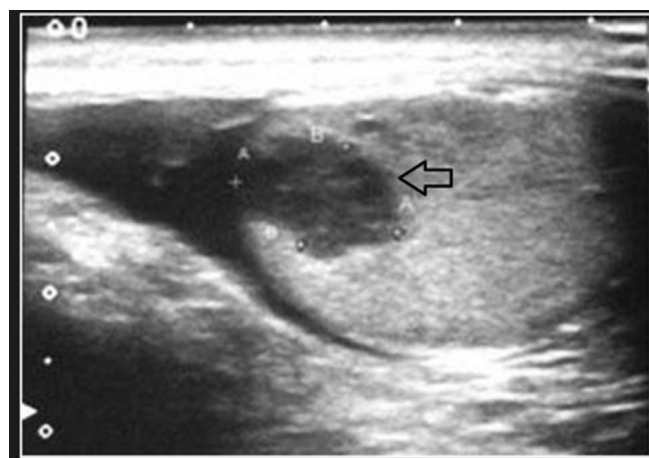


Fig. 1. Testicular ultrasound shows a lower polar left testicular, vascularized mass measuring 13 × 9 mm.

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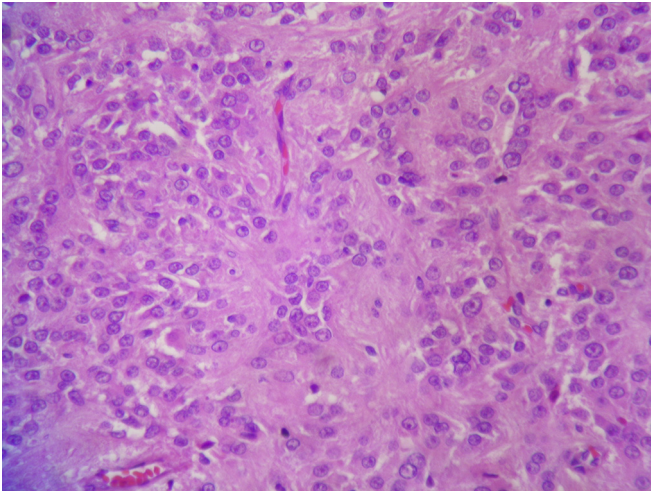


Fig. 2. Proliferation spans within a vascularized endocrinous stroma, the cells are monomorphic, with eosinophilic cytoplasm, the nuclei are rounded, regular and nucleolated. The spermatocord is healthy. There is no invasion of albuginea.

increased) and LH (lowered). The diagnosis is made histologically: The tumor is conventionally colored brownish-yellow.^{1,2} The tumor is composed of large cells eosinophilic granular cytoplasm containing 40% of Reinke crystalloids.^{2,3} Histological diagnosis of malignant forms is the most difficult problem. The presence of vascular emboli constitutes in practice the best histological criterion of malignancy, and present in 75% of the cases. The monitoring of these tumors is therefore essential in order to monitor the appearance of possible metastasis. The metastases are in the first place retro peritoneal ganglionic, then lung, bone and liver, and

may occur several years later the orchidectomy.^{4,5} The treatment of Leydig cell tumors is based in principle on unilateral orchidectomy. This treatment makes it possible to obtain complete and definitive healing in the forms benign. Treatment of malignancies is not coded, as no protocol has demonstrated its effectiveness. It involves ganglion mass surgery, chemotherapy and radiotherapy. The prognosis is dark and the median survival is about 3 years.

4. Conclusion

Leydig cell tumors are uncommon neoplasms arising from gonadal stroma. In Leydig cell tumors orchidectomy is the elected therapeutic decision. In the absence of any sign of malignancy, long-term follow-up is necessary to exclude recurrence or metastasis.

Conflicts of interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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