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Urology

Bilateral Malignant Non-Hodjkin's Lymphoma Metastatic of the Testis: A Case Report and Review of the Literature

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Abstract	Case Report

Primary non-Hodgkin's malignant lymphoma (NHML) of the testis is common in older men and is rare, accounting for between 1 and 9% of testicular tumors. The most common clinical manifestation is a painless unilateral testicular swelling but bilateral involvement is observed in about 35% of patients. We present a 61 year old patient with a history of right orchiectomy 7 months ago. He consulted us with a left testicular pain that was 4 months old. Clinical examination of the patient revealed a large hard left bursa and inguinal adenopathy. Given the patient's history, the clinical picture, and the lack of additional immunostaining from the anatomical study, a further workup revealed a LMNH of high grade of metastatic germ cell type "B". After RCP, the patient was refered to oncology.

Keywords: testis, lymphoma, NHML.

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INTRODUCTION

Primary non-Hodgkin's lymphoma (NHL) of the testis is a common disease in elderly men and is rare, representing between 1 and 9% of testicular tumors. The most common clinical manifestation is a painless unilateral testicular swelling but bilateral involvement is observed in about 35% of patients [1].

In 90% of cases, testicular lymphomas are of large cell (high grade of malignancy) or intermediate cell B phenotype [2]. The management of this form of LMNH must be multidisciplinary and is based on an enlarged inguinal orchiectomy, adjuvant chemotherapy and radiotherapy of the contralateral testicle and prophylaxis of neuromeningeal forms [3].

Patient Presentation

This is a 61 year old patient with a history of right orchiectomy seven months ago. The anatomopathological study had suspected a lymphoma imposing a complement of immunomarking. He consulted us with a left testicular pain that was four months old. The clinical examination of the patient revealed a large hard left bursa and inguinal adenopathies. According to the patient's history, the clinical picture, the lack of additional immunostaining, additional tests including tumor markers, inguino scrotal ultrasound, thoracic abdominal pelvic CT and additional immunohistochemical study were requested revealing a LMNH "B" of high grade of metastatic germ cell malignancy.

After RCP, the patient was referred to oncology.

DISCUSSION AND REVIEW OF THE LITERATURE

Epidemiologically, primary testicular lymphoma is rare and represents 1 to 2% of all non-Hodgkin's lymphomas occurring in 85% of cases in patients over 60 years of age, which corresponds to the age range of our patient [4].

Clinically, a testicular mass is the mode of presentation, most often unilateral.Our patient presents with bilateral involvement. The literature is consistent with our study because although bilateral expectation is rare, it is possible [5].

The inguinal approach to perform an orchidoctemy completed by an anatomical pathological examination constitutes the first diagnostic and therapeutic means of testicular tumors [3].

Histologically, primary testicular lymphomas are present in 80 to 90% of cases by diffuse large B-cell lymphoma concordant with our case [6].

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Therapeutically, orchiectomy combined with systemic chemotherapy, scrotal radiotherapy and prophylactic intrathecal chemotherapy is the diagram of treatment. It is widely accepted that orchiectomy is the primary diagnostic approach and first therapy [7].

From the above, it appears that our case corresponds to the data of the literature even though it did not benefit from a multimodal treatment from the first diagnosis for reasons either socioeconomic and cultural (lost of sight) or related to the covid19 pandemic.

CONCLUSION

Although rare, non-Hodjkin's malignant lymphoma of the testis affects mostly the elderly and has a poor prognosis with metastases to the central nervous system, lung, Waldeyer's ring and skin. Anatomopathology, immunohistochemistry in order to eliminate a seminomatous germ cell tumor and extension workup is the base of the diagnosis.

Treatment consists of orchiectomy, systemic chemotherapy, scrotal radiotherapy and prophylactic intrathecal chemotherapy.

REFERENCES

 Sénéchal, C., Saint, F., Petit, T., & Petit, J. (2009). Primary non-Hodgkin lymphomas of the testis: long-term prognosis associated with treatment combining systemic and intrathecal chemotherapy. Advances in Urology, 19 (3), 209-214. doi: 10.1016/j.purol.2008.11.011.

- Deng, L., Xu-Monette, Z. Y., Loghavi, S., Manyam, G. C., Xia, Y., Visco, C., ... & Young, K. H. (2016). Primary testicular diffuse large B-cell lymphoma displays distinct clinical and biological features for treatment failure in rituximab era: a report from the International PTL Consortium. *Leukemia*, 30(2), 361-372. doi: 10.1038/leu.2015.237.
- Chen, B., Cao, D. H., Lai, L., Guo, J. B., Chen, Z. Y., Huang, Y., ... & Wei, Q. (2020). Adult primary testicular lymphoma: clinical features and survival in a series of patients treated at a high-volume institution in China. *BMC cancer*, 20(1), 1-11. doi: 10.1186/s12885-020-6711-0.
- Cheah, C. Y., Wirth, A., & Seymour, J. F. (2014). Primary testicular lymphoma. *Blood, The Journal of the American Society of Hematology*, *123*(4), 486-493. doi: 10.1182/blood-2013-10-530659.
- Horne, M. J., & Adeniran, A. J. (2011). Primary diffuse large B-cell lymphoma of the testis. *Archives* of pathology & laboratory medicine, 135(10), 1363-1367. doi: 10.5858/arpa.2010-0158-RS.
- Mazloom, A., Fowler, N., Medeiros, L. J., Iyengar, P., Horace, P., & Dabaja, B. S. (2010). Outcome of patients with diffuse large B-cell lymphoma of the testis by era of treatment: the MD Anderson Cancer Center experience. *Leukemia & lymphoma*, *51*(7), 1217-1224. doi: 10.3109/10428191003793358.
- Şentürk, A. B., Ekici, M., & Ersoy, H. (2015). "Primary Testicular B-cell Lymphoma," *J. Urol. Surg*, 2(4), 193–194, doi: 10.4274/jus.346.