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Case Report

Testicular lymphoma in inguinal hernia

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ABSTRACT

Primary testicular lymphoma is a rare disease that has a higher incidence in patients over 60 years of age, presenting as an increase in volume in the inguinal region, which is usually painless and slow-growing. In the case that we present, it is a patient who was initially diagnosed with an indirect inguinal hernia due to the findings on examination and ultrasound, without presenting relevant findings in the laboratory studies, during the trans-operative we found testicular tumor compatible with diffuse large B-cell lymphoma, this being the most common variant of testicular lymphoma. This case emphasizes on importance of pre-operative suspicion in older age patients with increased volume in the groin region and without a clear diagnosis.

Keywords: Inguinal hernia, Testicular lymphoma, Non-Hodgkin lymphoma

INTRODUCTION

Inguinal hernias account for 75% of all abdominal wall hernias. Males represent about 90% of all inguinal hernias and women about 10%. An inguinal hernia will affect almost 25% of men and less than 2% of women in their lifetime. The finding of a testicular lymphoma within Non-Hodgkin lymphomas (NHL) are more frequent in the adult population and have a gradual increase in frequency with respect to age, which on average is between 45 and 55 years, however primary testicular lymphoma is considered a rare neoplasm representing <5% of testicular malignancies and 1-2% of NHL cases.[1]

CASE REPORT

56-years-old male patient, with the following relevant pathological personal history: allergic to penicillin, denies previous surgeries and chronic degenerative diseases. His current condition begins with an increase in volume in the left inguinal region of 2 years of evolution, not painful without changes in skin color or accompanying symptoms, attending an evaluation for presenting pain in groin area, intensity 6 out of 10 on an analogous visual scale, which increases with physical activity and decreases with rest, denies fever, changes in bowel habits or urinary symptoms, also refers to noticing stiffness at the level of the left testicle for 2 months. Physical examination highlights the left inguinal region with an increase in volume of 3×4, indurated. 1×1 cm inguinal ring, right inguinal region with reducible hernial sac of approximately 2×2 cm, 1×1 cm ring, no evidence of ischemia. It has USG which reports: protrusion of a hypoechoic, heterogeneous occupational mass defect measuring 42×28×34 mm, over the trajectory of the inguinal canal, a defect of 13 mm, increase with the valsalva maneuver to 14 mm without displacement when suspending the maneuver, concluding: left inguinal hernia to the lower third (Figure 1). An approach is made in the left inguinal region, however, when the inguinal canal is explored, the left testicle is found with an increase in size of approximately 8×6 cm, indurated with irregular edges of a mixed solid and liquid component, for which an orchiectomy is performed (Figure 2). Left radical and the sample is sent to the pathology service, which reports primary testicular NHL, a diffuse histological subtype of

high-grade B immunophenotype large cells (Figure 3), with testicular tunica and peripheral soft tissues positive for neoplasia as well as muscle invasion. cremaster and perineural infiltration. Immunohistochemistry is performed, which reports positive CD20, BCL2, BCL6, MUM1 and Ki-67, with a 65% profile.

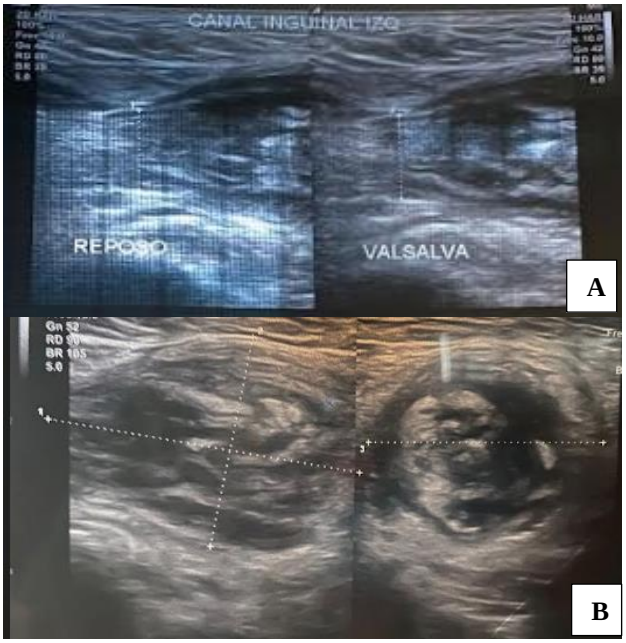

Figure 1: Inguinal hernia with hypoechoic, heterogeneous image without displacement or regression to the valsalva maneuver.

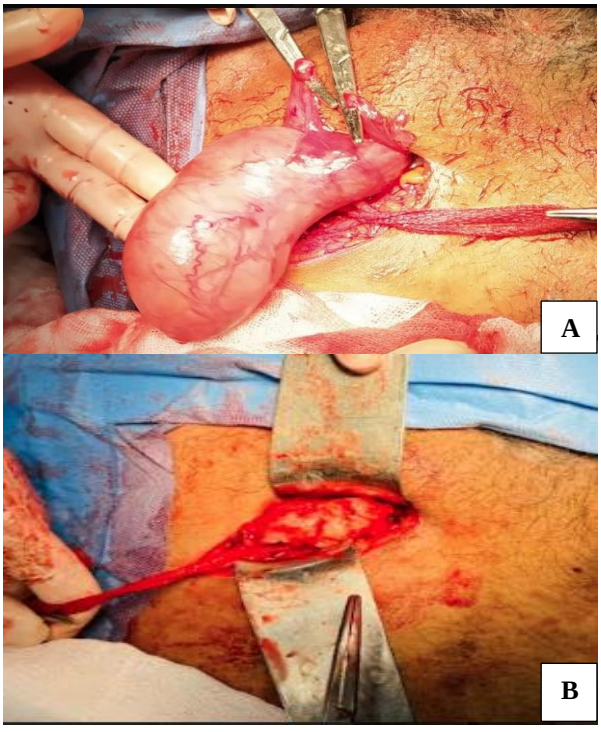

Figure 2: Approach in the left inguinal region showing the protrusion of the testicular tumor.

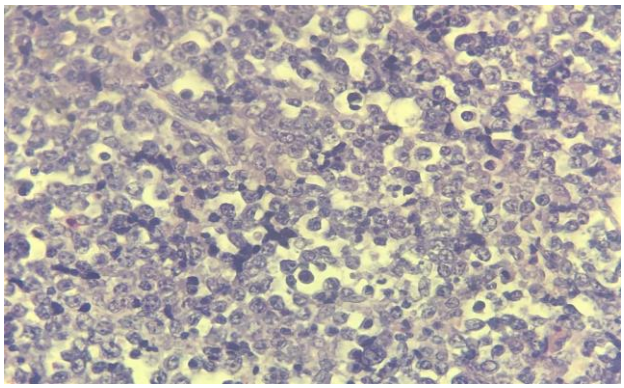

Figure 3: Lymphoid neoplasm with diffuse growth pattern made up of atypical medium and large cells with an immunoblastic and centroblastic appearance.

DISCUSSION

Primary testicular lymphoma (PTL) is a rare testicular neoplasm that mainly affects patients older than 60 years, representing <5% of testicular malignancies and 1-2% of NHL cases and 1-9% of all malignant testicular neoplasms.[1,2] The most common symptom is painless unilateral testicular inflammation that develops over more than weeks or months, even several years, in addition, a minority of patients present with acute painful testicular swelling.[3] Presentation with bilateral growth is not rare, appearing in 35% of cases.[4]

As has already been described in other articles, the most common histological subtype that coincides with our case is the variety of diffuse large B-cell lymphoma (LDCBG), found in 82.9%, followed by 1.80% follicular lymphoma.[5] Unlike the other types of testicular tumors, elevation of these markers is not common in this variant.[6] When a testicular neoplasm is suspected, one of the first imaging studies is ultrasound. In cases of lymphoma, it is seen as a hypoechoic lesion that can be found as one large lesion or multiple small lesions that encompass the testicular parenchyma.[6]

CONCLUSION

PTL is a rare disease that presents with few symptoms, aggressive behavior and a poor prognosis. Since there is no protocol to make the diagnosis, multiple studies suggest starting with an ultrasound and, according to the findings, request a later tomography to show activity in other organs. It is of utmost importance for the surgeon to take into account as a diagnostic difference in the case of an inconclusive inguinal hernia diagnosis, despite the fact that there are already a greater number of case reports and that this pathology is accompanied by a poor prognosis even when it is diagnosed in early stages, there is still no adequate study and prevention protocol.

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