Case Report

Relapse of Primary Testicular Lymphoma Masquerading As Irreducible Inguinal Hernia

Srinivas KG1, Doddamani MR2, Uday Kumar KV3, Hucchannavar S4, Hosamani IR5

1Junior Resident, 2Senior Resident, 3Asst. Professor, 4Assoc. Professor, 5Professor;
Department of General Surgery, Karnataka Institute of Medical Sciences, Hubli, India.
Corresponding Author: Srinivas KG

ABSTRACT

We report an interesting and rare presentation of a relapsed case of primary testicular lymphoma masquerading clinically as an irreducible inguinal hernia. A 70 year old male with a past history of being diagnosed with primary testicular lymphoma presented to us with an irreducible inguinoscrotal swelling which was diagnosed as an irreducible inguinal hernia, however on ultrasonography the swelling was found to be a solid mass with features suggesting it to be a lymph node, we further subjected the mass to a core needle biopsy which proved it to be a diffuse large B-cell primary testicular lymphoma. Lymph nodes masses are commonly seen in the groin and can be easily differentiated from inguinal hernias based on their location and consistency, however here we describe a mass clinically mimicking a hernia and later were found to be a metastatic lymph node.

Keywords: irreducible inguinal hernia, primary testicular lymphoma, inguinoscrotal swellings, groin lymph nodes

INTRODUCTION

Inguinal hernias form a large chunk of general surgical practice, and hence it becomes essential for the general surgeon to know the differential diagnosis for a case of inguinal hernia, the most common in males being a vaginal hydrocele, followed by a femoral hernia, spermatocele and very rarely a lipoma of the cord. [1]

Primary testicular lymphoma is a subtype of extranodal non-Hodgkins lymphoma, it is a rare disorder presenting mostly in elderly males as a painless enlargement of the testis, it accounts for approximately 9% of all testicular neoplasms [2] and still in spite of its low incidence remains the most common testicular malignancy in the elderly population. [2]

It is mostly asymptomatic and presents as a painless enlargement of the testis. It can also present as an enlarged lymph node in the groin and inguinal region and in advanced stages patients may present with CNS involvement in the form of paraparesis.

However here we come across a patient previously diagnosed with a testicular lymphoma present with an inguinoscrotal swelling which on clinical
examination was diagnosed as an irreducible inguinal hernia but on further investigation was found to be a metastatic enlarged lymph node.

CASE REPORT

A 70 year old male patient presented to us with the chief complaints of an inguinoscrotal swelling on the left side since two months and generalized weakness, the swelling did not reduce on lying down and was not associated with symptoms such as abdominal pain, distension, vomiting or constipation, past history was significant, patient underwent a left sided high orchidectomy three months back and was diagnosed to have testicular lymphoma for which he underwent treatment at a higher centre.

General physical examination showed the patient to be an elderly male, poorly built and nourished, vitals were stable and there was no palpable lymphadenopathy, upon local examination of the left inguinal region, a pyriform shaped swelling extending from the root of the scrotum to the mid inguinal point was noted, measuring about 7.3 x 3.8cm, there was no visible or palpable cough impulse, the swelling did not reduce in size on lying down, it was firm in consistency, there was no local rise of temperature or tenderness, upon examination of the opposite inguinal region in the standing position, a spherical shaped swelling of size 2x1 cm was found with a positive cough impulse and which disappeared completely on lying down and upon blocking the mid inguinal point with the thumb and asking the patient to cough, the swelling failed to appear, a provisional diagnosis of irreducible inguinal hernia on the left side and uncomplicated direct inguinal hernia on the right side was made, examination of the scrotum revealed absent left testicle, rest of the examination was normal.

Figure 1. Swelling in right inguinoscrotal region

Figure 2 a and b
Representative photomicrograph shows sheets of large atypical lymphoid cells with high nuclear/cytoplasmic ratio, pleomorphic vesicular nuclei with conspicuous nucleoli. Few binucleated cells are also seen. (H&E stain)
Patient underwent ultrasonography of the inguinal region and testis, ultrasonography revealed the lesion on the left side to be a solid mass with heterogeneous echo texture with features suggesting it to be a lymph node and the lesion on the right side was found to be a direct inguinal hernia with a defect size of 1.3 x 0.5 cm noted in the region of the Hasselbach’s triangle with omentum as its content, ultrasound of the testis showed a normal right testicle.

The lymph node was subjected to a FNAC examination and it showed features of a diffuse large B-cell lymphoma, which was confirmed with a core needle biopsy. The patient was then referred to the medical oncologist for further management.

**DISCUSSION**

Testicular lymphoma is classified as an extranodal non-Hodgkins lymphoma mostly of B cell origin. It is considered the most common cause for testicular enlargement in the elderly population and carries a poor prognosis, hence it is essential to maintain a high level of suspicion while evaluating a testicular swelling in the elderly population, PTL has a predilection for spreading to unusual extranodal sites, including the CNS, contralateral testicles and Waldeyer’s ring. \(^3\) primary testicular lymphoma has a high relapse rate, even when the disease is localized at diagnosis and confined to the testicles due to its aggressive nature it frequently relapses. One retrospective study that was reported by the International Extranodal Lymphoma Study Group (IELSG) included 10 countries and 373 patients with primary testicular DLBCL and found that the median age at diagnosis was 66 years. Testicular DLBCL is characterized by a particularly high risk of extranodal relapse even in cases with localized disease at diagnosis. In this study, the median follow-up was 7.6 years and 195 patients (52%) relapsed; CNS relapse was detected in 56 patients (15%). In addition, the median overall survival (OS) time was 4.8 years. \(^4\)

Primary testicular lymphoma is most commonly of the diffuse large b cell type (DLBCL) and orchiectomy is necessary for confirmation of the diagnosis followed by chemotherapy with CHOP and CHOP-like regimens.

In the current case under study due to the uncertainty faced during the clinical examination we subjected the patient to an ultrasononography of the groin which revealed the lesion to be a lymph node mass, current evidence does not recommend ultrasonography for all cases of groin hernia, however
when the clinical findings are suspect, it is worthwhile to go for a ultrasound, however the major disadvantage being that it is highly operator dependent, but due to its easy availability and cost effectiveness, ultrasound remains the first choice of investigation while investigating a groin mass, however CT and MRI are fast gaining popularity, with the advent of dynamic MRI imaging which can demonstrate a hernia during straining. Other malignancies which can present as a groin hernia include retroperitoneal sarcoma, metastasis and testicular tumors. However lymphomas are more common.

CONCLUSION
In the present case report we would like to highlight the fact that recurrent PTL can mimic an inguinal hernia and it is necessary for the general surgeon to keep in mind that enlarged lymph nodes can present as irreducible inguinal hernias.

ACKNOWLEDGEMENTS
We would like to thank Dr MSN Prasad, Pathologist of Shankara Cancer Centre, Bangalore, for the histopathology images, Dr. B.S Madakatti, Head, Dept of General Surgery, KIMS, Hubli for his constant support and Dr Vishrut K.S junior resident, PGI Chandigarh for the timely inputs.

Abbreviations used
FNAC- fine needle aspiration cytology
PTL- primary testicular lymphoma
DLBCL- Diffuse large B-cell lymphoma

REFERENCES