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Case Report

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Surprise hanging by the cord

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ABSTRACT

Testicular cancer is curable. Excellent cure rates have been met by standardized treatment. We present a 65-year-old male with irreducible swelling in the right groin. On examination, there was a right inguinoscrotal irreducible tender swelling. USG was suggestive of testicular tumour. Intraoperatively, there was a hard swelling in the groin arising from the cord with enlarged, hard testis. It was excised with a right high orchidectomy and was diagnosed as seminoma testis histopathologically. Histopathology confirmed seminoma testis and the patient was advised chemoradiation. Testicular tumours are a rare presentation at this age. Metastases to the inguinal region are seen in only about 2% of patients with testicular cancer; few have inguinal lymph-node spread and the rest have metastases to the cord. Therefore, high ligation of the spermatic cord is important. Radiotherapy in seminomas of testes have proven excellent results. Testicular tumours with secondary hyrocele can mislead diagnosis. In such cases the metastases would be restricted to local regions than distant metastases. This case is being reported in view of its rarity with review of literature.

Keywords: Cord metastasis, Seminoma, Testicular tumour

INTRODUCTION

Testicular cancer accounts for 1-2% of all male cancers. Amongst germ cell tumors (GCTs), seminomas are the most common constituting about 40-45%. Rarely they have been reported to be associated with true hermaphroditism. There are 3 histological subtypes-classic, anaplastic, spermatocytic. Bulky retroperitoneal metastasis can occasionally spread in retrograde fashion to iliac and inguinal nodes. The lymphatics drain to the retroperitoneal nodes through gonadal vessels around the aorta and inferior vena cava between lower thoracic and lumbar vertebra. They accompany testis to reach the retroperitoneal para aortic lymph nodes. Tumour can extend into the epididymis, scrotal wall and vas by breaching tunica vaginalis. This may lead to primary involvement of iliac and inguinal nodes, as in our case. Occasionally, prior surgical manipulation can result in inguinal metastasis. Lymphatics from lower abdominal wall, perineum, scrotum and penis drain into superficial inguinal nodes. Lymphatics from superficial inguinal nodes, deep penile structures and lower limbs drain into deep inguinal nodes, which are deep to fascia lata.[1]

Seminoma may spread through subepithelial capillary network as postulated by Lockett et al. Therefore, radical inguinal orchidectomy has been proposed as the procedure of choice for testicular tumors to avoid the complications due to scrotal contamination.[2]

Testicular cancer is highly curable. Excellent cure rates have been met by standardized treatment. Early detection of disease, chemotherapy and lymph node dissections have been investigated to improve cure rates.[3] Patients remain disease free after bilateral nerve-sparing retroperitoneal lymph node dissection with complete

tumour excision. Further monitoring is done with serum tumor markers.[4] There have been very few case reports of relapse.

CASE REPORT

A 65 year old male came with complaints of swelling in the right groin region for 6weeks which was gradually progressive in nature. It was associated with dragging pain, constipation. He also had history of weight loss with prior history of hydrocele repair 20 years ago. He was a smoker.

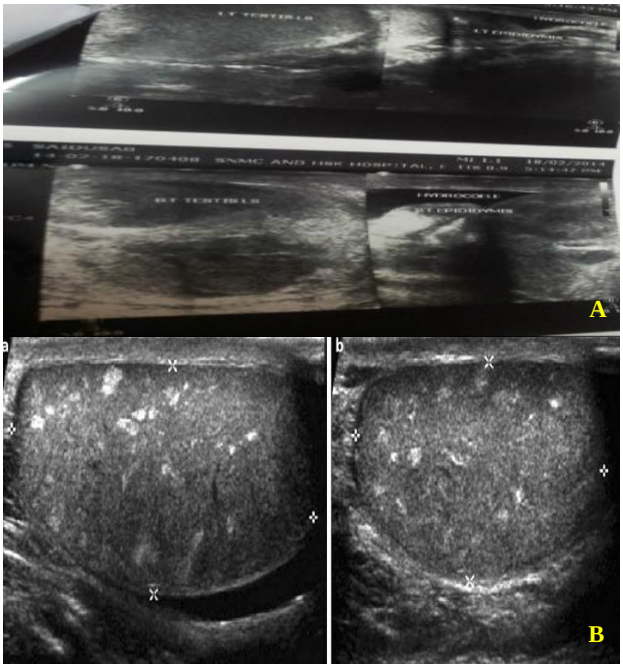

Figure 1: Ultrasound scrotum showing hypoechoic areas.

On examination, a right scrotal scar was noted. Right testis was hard and enlarged with a right inguinal irreducible swelling of size 7x5 cm with no cough impulse, both the swellings not palpable separately.

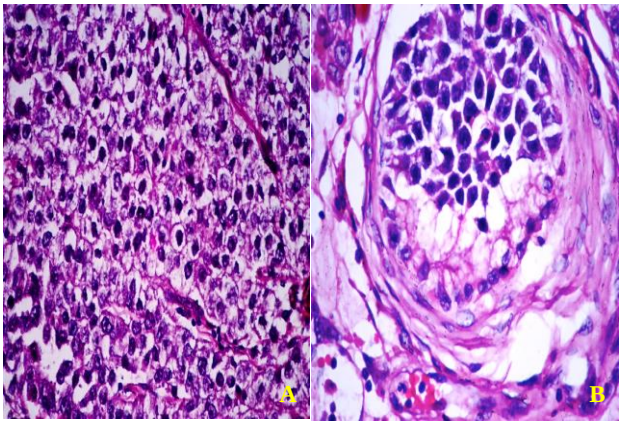

Figure 2: Histopathology of seminoma of testis with cord metastasis.

Ultrasound of the right inguinoscrotal region showed multiple hypoechoic areas in the right testis. It also showed a globular hypoechoic mass in the superficial inguinal ring extending down into scrotal sac with no peristalsis. CT chest and abdomen were normal. LDH, HCG and AFP levels were within normal limits.

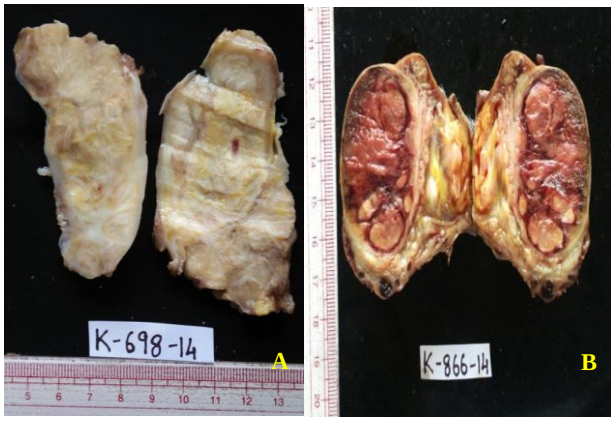

Figure 3: Specimen showing testicular tumour.

Intraoperatively, 8x6 cm hard growth was noted around the cord along with hard and enlarged testis. This was assumed to be a denovo tumour of the cord. Excision of the inguinal mass was done with high inguinal orchidectomy. Specimen was sent for histopathology. Post operatively, patient recovered well.

Histopathology showed anaplastic seminoma of testis with vascular invasion and cord metastasis. The disease was staged as stage 1B based on tumour size, histology and markers. Patient was advised chemoradiation.

DISCUSSION

Testicular tumours are a rare presentation at this age. The incidence of inguinal metastases has been reported to be 2-10 percent in patients with prior history of orchidopexy or scrotal surgery who have a testicular tumor. Ismail et al reported a case of 45-year-old true hermaphrodite male, who developed a testicular seminoma. He had a history of undergoing left orchidopexy at 10 years of age. It has been suggested that previous inguinal or scrotal surgery may alter the pattern of nodal metastasis of testicular cancer as observed in our case with cord invasion. If lymph nodes are found positive, cisplatin, vinblastine and bleomycin chemotherapy should be given.[1]

Another case of testicular seminoma in a 56 year old man was reported by Lockett et al. In this case, tumour directly spread along the vas deferens in the subepithelial plane to mesenteric nodes with no involvement of para aortic nodes. This explains altered metastatic route in seminomas. Metastases to the inguinal region are seen in only about 2% of patients with testicular cancer; few have inguinal lymph-node spread and the rest have

metastases to the cord as described in our case.[2] Therefore, high ligation of the spermatic cord is mandatory.[3] Another case was illustrated by Subramanian et al, which concluded that chemoradiation in earlier stage of disease can yield excellent results.[4]

Another cohort study predicted that majority of testicular tumours presented in earlier stages (72%). Analysis suggested that large tumor size greater than 4cm, vascular, rete testis, tunica albuginea and spermatic cord invasion were predictive of metastasis. Further multivariate analysis concluded that tumor size greater than 6cm and rete testis invasion were major predictors of metastasis as seen in our case where tumour size was 8cm.[5]

The average duration between the patient's visit to the doctor and tumor recognition was reported to be 5 weeks by Sato et al, which did not affect the clinical stage. In present case, the presentation was at 6 weeks. Tumor size and the serum lactate dehydrogenase (LDH) level were important predictors of stage of the disease. Stage I disease generally required post-operative radiotherapy following orchiectomy while stage II patients were treated with post-operative chemotherapy.[6,7]

CONCLUSION

Prior scrotal or inguinal manipulation may result in altered presentation of seminomas. A high orchidectomy with minimal careful handling is mandatory.

Testicular cancer is curable and the main factors determining prognosis are the stage, early orchidectomy and early chemotherapy. Younger age group has better survival. This case reinforces the need for high spermatic cord ligation and excision at the deep inguinal ring and the importance of immediate CT staging. All patients with low stage disease and normal tumour markers should also undergo CT scan. Seminomas with secondary hydrocele can generally present with local cord metastases rather than distant metastases and continue to have good prognosis with current treatment strategy.

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