Metastatic seminoma with cervical lymphadenopathy as initial presentation and without retroperitoneal or mediastinal lymphadenopathy

Rao MK, Shetty JK, Theerthanath S, Prajwal R

ABSTRACT

Testicular germ cell tumors usually present as painless scrotal swelling. In rare cases these tumors may present with cervical lymphadenopathy as initial presentation. Lymphatic metastases from testicular germ cell tumor tend to be contiguous, spreading from the abdomen into the chest and finally into the neck. We present a case of testicular seminoma with cervical lymphadenopathy as initial presentation and without retroperitoneal or mediastinal lymph node metastases, which is extremely rare.

Key words: seminoma, germ cell tumor, cervical lymphadenopathy, retroperitoneal lymphadenopathy

INTRODUCTION

Testicular cancers, although represents only one percent of all malignancies in men, are the most common neoplasms in boys and young adults in the age group of 15 to 34 years. Germ cell tumors account for 98% of all testicular malignancies. In testicular carcinoma, the incidence of neck metastases range from 4.5 to 15% and in an estimated 5% of these cases, a neck mass is the initial presentation. Lymphatic metastases from testicular germ cell tumors tend to be contiguous, spreading from abdomen into the chest and finally into the neck. We report an unusual case of metastatic seminoma that initially manifested as a neck mass, with an occult primary in left testis and without any other metastatic disease (particularly in the retroperitoneum). Although the presence of cervical lymph node metastases is believed to be a marker for advanced disease, even advanced testicular cancer is thought to be curable with appropriate therapy.

Overall cure rates for germ cell tumors are in the range of 90 to 95%, but maintenance of the cure rates requires structured and timely approaches to therapy.

CASE REPORT

A 42 years old man presented with complaint of swelling in left side of neck since ten days. The past medical history was not significant.
enlarged left testis. Biopsy of the testicular swelling was reported as seminoma. Thus the diagnosis of germ cell tumor of testis with cervical lymph node metastases was confirmed.

Fig.2. High magnification view showing seminoma cells arranged in sheets and columns by fine fibrous trabeculae associated with a lymphocytic infiltrate along with intratubular germ cell neoplasia (on right side)

CECT of thorax and abdomen was normal with no mediastinal or retroperitoneal lymphadenopathy. Left high inguinal orchidectomy was done. This was followed by four cycles of chemotherapy with EP regimen (cisplatin- 20 mg/m2 on days 1-5 and etoposide- 100 mg/m2 on days 1-5). Neck swelling completely dissappeared by the end of two cycles of chemotherapy. Two more cycles were given and CECT neck, thorax, abdomen and pelvis at the end of four cycles were normal. The patient is on regular follow up.

DISCUSSION

Testicular germ cell tumors have two broad categories: seminomas and nonseminomatous germ cell tumors (NSGCTs). Seminomas account for approximately 60% of all testicular germ cell tumors. Its incidence is highest among men aged 30 to 39 years, and it declines steadily with advancing age. When a neck mass is found to be a metastatic germ cell tumor, it is usually in the setting of a known primary tumor and other known metastatic disease, particularly beneath the diaphragm. Although some authors have estimated that as many as 5% of germ cell tumors initially manifest as a neck mass, case reports of such a phenomenon are rare. All germ cell tumors have a propensity for lymphatic spread but NSGCTs are more likely to demonstrate hematogenic spread. Both sided testicular tumors spread first to the retroperitoneal nodes and then move superiorly along the thoracic duct. Lymphatic metastases tend to be contiguous, spreading from the abdomen into the chest and finally into the neck.

Treatment strategies for advanced germ cell tumors continue to evolve. The treatment plan depends on the histology of the tumor (seminoma vs. NSGCT), the site of metastasis, and serum concentrations of tumor markers. Once cervical lymph nodes are involved, the tumor is classified as stage 3 and initial treatment is generally chemotherapy.

The management of seminoma is less clear and may be more controversial than that for NSGCT. In seminoma, tumor markers may be negative at presentation (as was the case with our patient) and therefore may not be available to guide therapy. Also, seminomas tend to be more radiosensitive than are NSGCTs. Consequently, post chemotherapy management of residual masses (as studied in the retroperitoneum) might include radiotherapy, observation, or surgical resection; no studies address cervical seminoma specifically. However, researchers who did consider seminoma together with NSGCT in the more general category of germ cell tumors continue to recommend surgical resection of residual neck masses following chemotherapy.

CONCLUSION

It is imperative to keep in mind the possibility of metastatic seminoma while dealing with neck node metastases in an adult male along with other differential diagnoses like metastatic carcinoma, lymphoma or amelanotic melanoma.

AUTHOR NOTE

Mallikarjuna Rao K, Sr. Resident, Radiotherapy and Oncology (Corresponding Author); email: mallik711@gmail.com
Jayarama Shetty K, Professor, Radiotherapy and Oncology
Theerthanath S, Professor, Pathology
Prajwal Ravinder, Associate Professor, Urology
K.S.Hegde Medical Academy

IJRRMS | VOL-3 | No.3 | JULY - SEP | 2013
REFERENCES