Unusual association of diseases/symptoms

Unusual presentation of mixed germ cell tumour from testis in a 45-year-old man

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Testicular cancer is a common neoplasm in young and middle-aged men. Although, the most common presentation is a palpable testicular mass, it can present with atypical symptoms. There is a lack of awareness among primary-care physicians about the less common presentations of testicular tumours. Early detection is a key prognostic variable. Fever, weight loss, sweating and pain in the abdomen for 4 months in an adult man has multiple differential diagnoses especially if epigastric mass is present. We are presenting an interesting case of fever, weight loss, pain and mass epigastrium and generalised lymphadenopathy which proved to be a testicular germ cell tumour without any testicular symptoms and with normal tumour markers.

BACKGROUND

We decided to write this interesting case which would have been misdiagnosed as a lymphoma in view of generalised lymphadenopathy and B symptoms. The role of a pathologist is highlighted as there were no symptoms or signs related to the testes and lead from the pathologist to ultrasonography is noteworthy.

CASE PRESENTATION

A 45-year-old man presented to the gastroenterology clinic with complaints of fever, night sweats, weight loss and abdominal pain. Patient was seen by a primary care physician and found to have abdominal mass, enlarged left supraclavicular lymphnode and left axillary lymphnode. Examination revealed an ill-looking patient, pale, weighing 77.5 kg. Patient was febrile with a temperature of 37.8°C. The left supraclavicular node was palpable as were the bilateral axillary nodes, largest being 3×3 cm. Abdominal examination showed a large 10×10 cm hard retroperitoneal mass. Genital and rectal examination were normal. CT scan of the abdomen and chest confirmed the retroperitoneal mass to be a lymphnode mass (figure 1) ruling out any mediastinal lymphadenopathy. Minimal free fluid was also noted in abdomen. In view of constitutional symptoms and peripheral lymphadenopathy, a provisional diagnosis of lymphoma was made. Left axillary lymph node biopsy was done and was reported as fat. Bone marrow biopsy done for staging reported as reactive without any tumour infiltration. Laproscopic biopsy of abdominal mass was done for tissue diagnosis which showed metastases rather than lymphoma. Complete blood counts showed haemoglobin of 8.2 g% (range 13–16 g%), normochromic normocytic anaemia. Serum chemistry was normal except for serum lactic dehydrogenase (LDH) level of 1527 U/l (range 20–247 U/l). Erythrocyte sedimentation rate (ESR) was 72 mm/h (normal up to

15) and C reactive protein (CRP) was 160.8 mg/l (normal 0.00–1.0 mg/l). Oesophagogastroduodenoscopy was normal. β -Human chorionic gonadotropin (β -HCG) was 1.10 mIU/ml (range <5 mIU/ml normal) and α -feto protein was 3.54 ng/ml (reference range 0–10 ng/ml). Serology for HIV-1 and HIV-2 were negative. The immune markers, Mantoux test for tuberculosis and other tumour markers like CA-19-9, Carcinoembryonic antigen and prostate-specific antigen were negative.

In view of anaemia, B symptoms, generalised lymphadenopathy and high ESR, CRP and LDH and negative tumour markers second opinion of pathologist was sought to rule out lymphoma. Pathologist again had the same opinion and advised ultrasonography of testes due to tumour characteristics of mixed germ cell tumour (MGCT) (figures 2 and 3). Ultrasonography of testes showed 3.6×2.9 mm echo-poor lesion in normal-sized right testis (figure 4). Patient was taken for orchidectomy and a greyish nodule was seen in the cut section (figure 5). Histopathology showed the features of MGCT with features of seminoma, teratoma and embryonal carcinoma. Patient was taken for chemotherapy as per British Columbia Cancer Agency protocol with code GUBEP (<http://www.bccancer.bc.ca>). Patient is doing well post-treatment and after two cycles of chemotherapy, the abdominal mass has regressed and is not palpable. LDH level has declined to 227 U/l against the pretreatment level of 1527 U/l. Patient is on regular follow-ups and is doing well.

INVESTIGATIONS

- ▶ Baseline
- ▶ Tumour markers
- ▶ CT scan abdomen and chest
- ▶ Laproscopic biopsy from abdominal mass
- ▶ Tissue diagnosis from testicular specimen
- ▶ Immunohistochemical staining.

Figure 1 CT scan showing the abdominal mass as the lymphnode mass.

Figure 2 Histopathological findings suggestive of metastases from testicular tumour.

Figure 3 Ultrasonographic picture of testicular mass as hypoechoic lesion.

Figure 4 Cut section of the testicular mass as a greyish-yellow nodule.

DIFFERENTIAL DIAGNOSIS

- ▶ Non-Hodgkins' lymphoma
- ▶ Gastric malignancy
- ▶ Pancreatic cancer
- ▶ Tuberculosis.

TREATMENT

- ▶ Right-sided orchidectomy
- ▶ Chemotherapy as per BCCA protocol with code GUBEP (<http://www.bccancer.bc.ca>).

Figure 5 Special staining of biopsy showing features of MGCT.

OUTCOME AND FOLLOW-UP

Improved and is on further treatment and follow-up.

DISCUSSION

Testicular cancer is the most common solid tumour in young and middle-aged men.¹ Although the most common presentation is a palpable testicular mass, it can present with atypical symptoms and signs.² Cases that have been reported associated with pain in the abdomen,² are supraclavicular mass,³ aortic involvement by metastatic lymphnode mass,⁴ gastric mass, duodenal perforation, occult blood loss, intussusception of jejunum, inferior vena cava thrombosis, and limbic encephalitis.^{5 6} Our case is unique, in presentation with B symptoms and generalised lymphadenopathy which led to a diagnostic difficulty and an initial clinical diagnosis of lymphoma was made. Normal levels of β -HCG and α -protein and normal-sized testes added to the difficulty. However, failure to gain adequate lymphnode tissue from the axilla and a normal bone-marrow biopsy led the pathologist to suspect testicular metastases.

Immunohistochemical staining is used to differentiate different types of germ cell tumours.⁷ This has therapeutic and prognostic implications.⁸ Our patient had embryonal component in addition to teratoma and seminoma. Embryonal component is associated with high relapse rate.⁹

Germ cell tumours especially seminomas are reported more frequently in patients with HIV.¹⁰ We presented this case with unusual presentation to highlight the clinical awareness about MGCT and the role of a pathologist in diagnosis.

Learning points

- Presence of B symptoms and generalised lymphadenopathy are not limited to lymphoma but can occur as an unusual presentation of MGCT.
- High serum lactate dehydrogenase may be the only tumour marker of a metastatic testicular tumour.
- Presence of normal-sized testes on examination does not rule out a primary source of a metastatic testicular tumour.
- Presence of ascites in metastatic germ cell tumour is noted.

Competing interests None.

Patient consent Obtained.

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