CORRESPONDENCE

An Unusual Case of Fungating Chest Wall Mass

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Dear Editor,

A 57-years old gentleman was symptomatic for 20 days with a rapidly progressive swelling over the anterior chest (Fig. 1a). He had a past history of Rheumatic heart disease, post Dual valve replacement surgery 10 years back (Aortic + Mitral) and was on anticoagulation with warfarin. He also complained of intermittent serous discharge from the midline sternotomy scar for the past 2 years.

The swelling when noted was small-around 1 × 2 cm, which rapidly progressed to form a fungating mass of 10 × 8 cm, with skin ulceration and pus discharge. There was accompanying chest pain and heaviness. There was significant loss of appetite (around 75% decrease) and loss of weight (around 5 kg lost in 1 month). He also complained of dysphonia for the past 2 weeks.

His complete blood count revealed hemoglobin 8.2 g/dl, white cell count of 6600/mm³ and platelet count of 129,000/mm³ and normocytic normochromic RBCs. Renal and liver function tests were normal. He had significant hypoalbuminemia (2.4 g/dl; normal range 3.5–4.5) and an elevated Lactate Dehydrogenase (1144 unit/L) (normal range 0–248).

Contrast enhanced CT neck, chest, abdomen and pelvis revealed a large heterogeneously enhancing soft tissue mass measuring ~ 16 × 13 × 11.7 cm (AP × TR × CC) seen in anterior, superior and middle mediastinum in prevascular location. Anteriorly, it was seen crossing the

bony and inter muscular planes and protruding outside exophytically from both the sides of sternum to produce an anterior chest wall mass. Cervical, mediastinal, axillary and abdominal lymphadenopathy was noted, with the largest lymph node being 1.5 cm in short axis diameter.

Trucut Biopsy from the mass confirmed it to be High grade DLBCL on Immunohistochemistry. Bone marrow examination revealed features suggestive of Hemophagocytic-lympho-histiocytosis with no evidence of infiltration by the lymphoma. Final diagnosis of Diffuse Large B cell Lymphoma, Stage IIIBEX, IPI 3/5 was made. Patient received chemo-immunotherapy with RCHOP and post single cycle of therapy, there was a marked reduction in size of the chest wall mass, with complete resolution after 3 cycles (Fig. 1b).

Chest wall tumors arise from a wide variety of benign and malignant etiologies. Benign lesions include lipoma, neurofibroma, lymphangioma, hemangioma and mesenchymal hamartoma. Malignant lesions include neuroblastoma, rhabdomyosarcoma, Ewings sarcoma, Askin tumour, Liposarcoma, desmoid tumors, metastases from distant tumor and lymphomas. Manifestations of systemic diseases such as leukemia, lymphoma, langerhans cell histiocytosis and infections such as Tuberculosis and Actinomycosis may also cause chest wall lesions. Most of the lesions require histopathological examination for definite diagnosis, with radiology required for demonstrating the extent of lesion.

Lymphoma presenting as chest wall tumor is a rare presentation, accounting for less than 2% of chest wall soft tissue tumours [1, 2]. In the background of a Rheumatic heart disease post valve replacement with history of chronic pus discharge from the scar, mitotic lesion affecting the scar and subsequent squamous cell carcinoma of the scar is to be considered. But in the index case, the mass was

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Fig. 1 **a** Photograph depicting the midline chest wall mass with ulceration over a midline sternotomy scar. **b** Complete resolution of the mass with chemotherapy

found to be arising from outside the boundaries of the scar. Considering the rapid progression and significant constitutional symptoms, a neoplastic etiology was considered

with dysphonia pointing towards a mediastinal origin of mass. The presence of a mediastinal mass extending onto the chest as a tumoral lesion hinted towards the presence of a lymphoma, which was confirmed on biopsy.

References

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