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Chest pain as a rare presentation of multiple myeloma

M R Siddiqui, Q T Islam, A Hossain, Y U Rahman, M S Mahbub, M J Iqbal, F Naz

Department of Internal Medicine, Dhaka Medical College Hospital, Dhaka, Bangladesh

Correspondence to M R Siddiqui, dr.mahmud99@yahoo.com

DESCRIPTION

A 65-year-old man presented with left lower chest pain for 2 months and low grade intermittent fever for 1 month. Pain was dull aching, more marked during movement and partially subsided after taking non-steroidal anti-inflammatory drugs. Examination revealed anaemia and tenderness in left fourth, fifth ribs, intercostal space in the mid axillary line. All other clinical examinations were normal. Investigations revealed complete blood count: Hb-7.1 g/dl, erythrocyte sedimentation rate (ESR) -140 mm in first hour, peripheral blood film - normocytic normochromic anaemia with marked rouleaux formation. Chest x-ray revealed a mass of the left chest wall with rib destruction suggestive of malignant pleural mesothelioma. A CT scan (figures 1–3) showed a spindle shaped 4×6 cm tumour,

localised at the lateral angle of the fourth, fifth rib and growing intrathoracic, with destruction of the fourth rib. The mass was relatively well demarcated and there were no cystic components. There was no evidence of lung or lymph node metastasis. CT-guided fine-needle aspiration of the chest wall mass showed an increasing number of plasma cells. With these clinical contexts our next investigation of choice was bone marrow examination, which revealed marrow was infiltrated with around 90% of both typical and atypical plasma cells including plasmablast. We therefore diagnosed this tumour as multiple myeloma (MM). Chest pain is a very unusual presentation of multiple myeloma. Isolated chest wall mass without any other skeletal involvement is even rarer. MM often produces gross sternal expansion, distortion and vertebral body

Figure 1 Coronal CT scan of chest shows a mass of the left chest wall with fourth rib destruction.

Figure 2 High resolution axial lung window CT scan of chest shows a spindle shaped 4×6 cm tumour, localised at the lateral angle of the fourth, fifth rib and growing intrathoracic, with destruction of the fourth rib.

Figure 3 Axial mediastinal window CT scan of chest shows a spindle shaped 4×6 cm tumour, localised at the lateral angle of the fourth, fifth rib and growing intrathoracic, with destruction of the fourth rib.

destruction.¹ The growth of these cells in the bone marrow can cause expansion and remodelling of bones even within the chest wall.¹ But chest wall involvement with mass lesion is very uncommon.²

Competing interests None.

Patient consent Obtained.

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