Skin Metastases of Pleural Mesothelioma: A Case Report

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Abstract

Background: Mesothelial cells are derived from the primitive embryonic mesoderm and line the pleurae and peritoneum. There are involved in malignant growth but rare and commonly metastasis to the lymph nodes, lung, liver, adrenal gland and the kidney. There are less than 50 cases of cutaneous metastasis of a rare disease in literature. We herein report a case of malignant mesothelioma with mostly anterior abdominal wall skin metastasis.

Case summary: We present OMI a 74-year-old architect who presented to us on account of difficulty in breathing, non-productive cough, left sided chest pain and marked weight loss. He presented at a peripheral hospital where he was treated with no marked improvement.

General physical examination he was found to be chronically ill, with Glasgow Coma Score of 8/15, dehydrated and in severe respiratory distress with respiratory rate of 45 cycles/min, not cyanosed with SPO2 of 84% which improved to 98% on oxygen and respiratory rate dropped to 32 cycles/min, bilateral supravacular lumphadenopathy. Examination of the chest revealed flattening of left chest wall with reduced left sided chest movement, trachea deviated to the left. Percussion note was dull on the left with absent air entry. Examination of the abdomen revealed a scaphoid abdomen which moves with respiration and multiple skin nodules.

Conclusion: Report a rare disease with metastases to skin of anterior abdominal wall an unusual site.

Case Presentation

A 74-year-old retired civil servant an architect presented through the A&E with difficulty in breathing, non-productive cough, left sided chest pain, marked weight loss, multiple peri umbilical skin nodules, occasionally drowsiness and lapse into unconsciousness. A known asthmatic and well controlled, 10 packed years and drink alcohol moderately. Resuscitation had started before our invitation with vital signs of RR 45 c/min, PR 110 b/m, BP 100/60 mmHg and SPO2 of 84% which improved to RR 32 c/m, PR 100 b/m, BP 100/70 mmHg and SPO2 of 98% after infusion of 1 L of R/L and oxygen by face mask.

Examination showed an elderly man in severe respiratory distress, with GCS of 8/15, mildly pale, dehydrated but not jaundiced, bilateral supravacular lymph nodes, multiples anterior abdominal wall skin nodules, no pedal oedema. Chest findings were only left sided dullness. ECOG was 4, right supravacular node and abdominal skin nodule were biopsied under local anaesthesia.

Discussion

Malignant mesothelioma is a rare neoplasm of the serosal membranes predominantly of the pleura and peritoneum. The incidence of malignant mesothelioma is increasing, especially in patients exposed to asbestos [1]. This current patient had not worked in a construction site, nor at cement factory and therefore not exposure to asbestos (Figure 1).

Cutaneous metastasis of malignant mesothelioma is relatively rare and can occur in three different ways; regional spread via lymphatics, direct extension within surgical scars such as needle track and distant metastasis by haematogenous [2]. In this present case multiple anterior abdomen skin nodules as distant skin metastasis is relatively rare. Ward et al. [2] reviewed 20 cases of malignant mesothelioma metastatic to the skin, excluding cases of direct extension or regional spread. The most commonly involved site was the face, followed by the scalp and chest [1] but in this case the skin nodules were mostly anterior abdominal wall skin, skin metastatic lesions occur mostly as subcutaneous nodules, and multiple lesions are often observed as in this case. by contrast, skin metastasis can occur as an initial manifestation [3-6].

Conclusion

Skin metastases of pleural mesothelioma are rare and less than fifty in literature have been reported. We herein report a rare disease in a rare circumstance.
References


