

Necrotic Mediastinal Mass in a Drug User; Squamous Cell Carcinoma of Unknown Primary Tumor

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INTRODUCCION

- Squamous cell carcinoma with an unknown primary tumor presenting as a solitary mediastinal mass is an unusual occurrence¹
- Differential diagnosis of mediastinal mass in a posterior compartment includes neurogenic tumors and thoracic spine lesions (i.e. Pott's disease)²

CASE PRESENTATION

- A 51-year-old female with human immunodeficiency virus (HIV) and poly-substance use disorder presented with increasing shortness of breath along with chest and back pain
- The physical examination was notable for lethargy and expiratory coarse breath sounds
- Laboratory results were significant for white blood cell counts of 73.5 K/CMM with 16% of band cells and hemoglobin 7.7 g/dL
- She was also HIV reactive with viral load of 95,300
- Urine toxicology was positive for opiates and cocaine, and she denied a intravenous drug use

DIAGNOSTIC TESTING

- Chest radiograph found emphysema with prominently widened superior mediastinum
- Computed tomography (CT) of the chest showed a large necrotic posterior mediastinal mass invading the upper thoracic vertebral bodies with pathologic compression fractures and possible epidural involvement

Figure 1. Computed tomography of the chest on presentation, coronal view



HOSPITAL COURSE

- Broad-spectrum antibiotics were started due to leukocytosis and possible infectious etiology
- The mass was considered not resectable by Thoracic Surgery
- Biopsy done by Interventional Radiology revealed poorly differentiated squamous cell carcinoma
- Flow cytometry was negative for evidence of B or T-cell lymphoma or acute leukemia
- Additional CT imaging showed no evidence of primary or metastatic disease in the chest, abdomen, or pelvis
- No further imaging evaluation of positron emission tomography or magnetic resonance imaging was undergone due to patient's severe anxiety
- Patient's respiratory status declined over time, requiring a higher level of oxygen delivery and pan-endoscopy to evaluate for the primary source could not be pursued
- She was eventually intubated for hypoxic respiratory failure but expired after palliative extubation per the patient's wish

CONCLUSIONS

- The patient's primary tumor remains unknown as further evaluation was limited due to declining clinical status
- However, the case represents a rare presentation of metastatic squamous cell carcinoma in the posterior mediastinum

REFERENCES

1. Blanco N, Kirgan D, Little A. Metastatic Squamous Cell Carcinoma of the Mediastinum with Unknown Primary Tumor. *Chest* 1998. 114(3): 938-940
2. Berry MF, Bograd AD. Approach to the adult patient with a mediastinal mass. *UpToDate*.