

Spontaneous pneumomediastinum complicated with epidural emphysema

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FIGURE 1. Chest CT scan revealed subcutaneous emphysema, a small pneumothorax, pneumomediastinum and epidural emphysema.



FIGURE 2. Coronal planes of CT scan showed the extensive presence of air in the epidural space.

A 21 year-old male was admitted complaining of dyspnoea, dysphagia, chest pain and cough of sudden onset, of 2 days duration. Physical examination revealed stable vital signs and crepitus over his shoulders and neck. Neurological examination showed no abnormal findings. Chest X ray showed subcutaneous emphysema and pneumomediastinum. Chest computed tomographic (CT) scan was performed for further evaluation, which revealed a small pneumothorax, pneumomediastinum and also epidural emphysema, based on the presence of air in the spinal canal (Figures 1 and 2).

The patient received antibiotic treatment because of fever and leucocytosis and had an uneventful recovery. Repeat chest CT scan after 15 days showed complete resolution of both the pneumomediastinum and epidural emphysema.

Free air surrounding the dura mater spinalis is an uncommon phenomenon that was first reported by Gordon *et al*, in 1977¹ and is described under various terms such as epidural emphysema, pneumorrhachis, intraspinal pneumocoele, spinal epidural and subarachnoid pneumatosis, aerorachia, pneumosaccus, air myelogram, pneumomyelogram and pneumomyelography.

Only a few case reports of epidural emphysema associated with spontaneous pneumomediastinum have been published.² It is generally caused by the mechanism of air infiltration along fascial planes from the posterior mediastinum, through the neural foramina and into the epidural space. Epidural emphysema is usually an asymptomatic epiphenomenon but can also give rise to symptoms, as can its underlying pathology, which is often severe, although it may be concealed requires careful investigation to ensure the correct diagnosis and adequate patient treatment.

REFERENCE

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