DIAGNOSIS

Spontaneous pneumomediastinum or Hamman’s syndrome

The chest X-ray revealed subcutaneous emphysema and a pneumomediastinum (figure 1). Computed tomography confirmed an extensive pneumomediastinum as well as subcutaneous emphysema together with ground glass opacities (figure 2). There were no signs of esophageal rupture. Echocardiography showed air artefacts around the pericardium.

Hamman’s syndrome is named after Louis Hamman and describes subcutaneous emphysema in association with a spontaneous pneumomediastinum.¹ Pneumomediastinum can be categorized as a primary or spontaneous pneumomediastinum and a secondary pneumomediastinum. There is no obvious cause for a spontaneous pneumomediastinum, whereas trauma or injury is the underlying cause of a secondary pneumomediastinum. A primary pneumomediastinum is a rare phenomenon with an incidence of approximately 1 in 25,000 and predominantly affects males,² and several mechanisms are described to explain its development. A sudden increase in alveolar pressure due to coughing can cause a rupture of the alveolar wall causing air to leak through the surrounding bronchovascular sheath.²,³ Air trapping, similar to asthma, also contributes to the development of high alveolar pressure. Apart from barotrauma, weakening of the alveolar wall can contribute to the occurrence of a pneumomediastinum.⁴ Viral pneumonitis also causes the alveolar walls to weaken,³ as do the use of drugs, such as cannabis and MDMA.²,³ Our patient was diagnosed with Influenza type A, suffered from asthma and was known to use both cannabis and MDMA.

REFERENCES