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A rare case of congenital pulmonary airway malformation presenting with chest pain and dyspnoea in an adult

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A healthy 19-year-old man, who was a non-smoker, presented with a first episode of sudden onset, unprovoked dyspnoea and pleuritic chest pain. Chest X-ray showed a cystic abnormality in the right lung (Figure 1). Subsequently, a computed tomography scan of the thorax revealed large cysts in the right lower lobe (Figure 2), in keeping with a diagnosis of congenital pulmonary airway malformation (Stocker, 1994, 2002). The patient underwent a right lower lobectomy.

Congenital pulmonary airway malformation is a rare developmental abnormality of the lower respiratory tract (Stocker, 1994, 2002). It is usually diagnosed in the first few years of life, but less commonly presents in adulthood. Surgery is the only definitive treatment and is recommended because of the risk of recurrent infections and malignant transformation namely pleuropulmonary blastomas, rhabdomyosarcoma or mucinous adenocarcinoma (Summers et al, 2010). This case highlights the importance of considering congenital pulmonary airway malformation as part of the differential diagnosis of pleuritic chest pain, especially in young adults.

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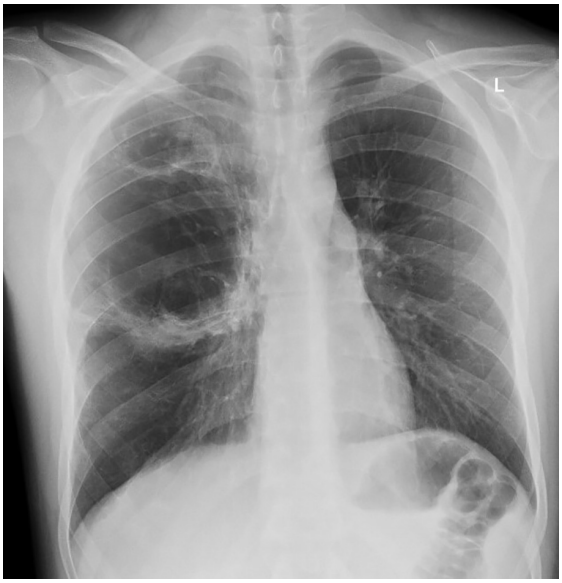

Figure 1. Chest X-ray showing a large cyst in the right lower lung zone.

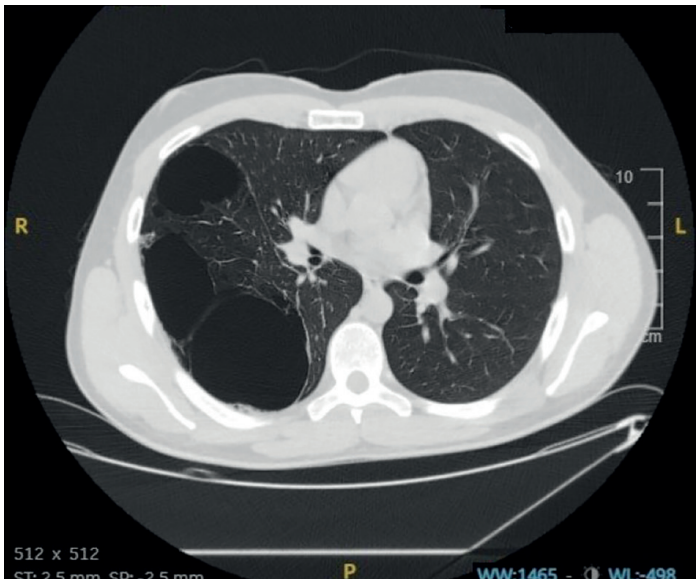

Figure 2. Computed tomography scan showing multiple large thin-walled cysts in the right lower lung lobe.