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ANSWER: CYSTIC BRONCHIECTASIS AND RETROSTERNAL GOITRE

This patient has cystic bronchiectasis of the left lower lobe and a goitre with retrosternal extension causing tracheal compression and deviation. He was treated with a course of intravenous antibiotic and frequent pulmonary suctioning to clear the secretions.

Bronchiectasis refers to the permanent destruction and dilatation of the airways in focal/diffuse manner.^{1, 2} It is classified into fusiform, saccular and cystic form. Causes include pulmonary infections that can be acute but more commonly chronic such as pulmonary tuberculosis and recurrent aspiration causing localised bronchiectasis, and immune deficiency state and less common genetic (cystic fibrosis), autoimmune or rheumatologic aetiologies causing diffuse bronchiectasis. The underlying pathogenesis include inadequate clearance of mucus secretion and infection resulting in chronic inflammatory damage and this often results in a vicious cycle of excessive bronchial inflammation, bacterial colonisation and infection.^{1, 2} In our

case, it is possible the retrosternal goitre contributed to the pathogenesis. Tracheal compression may affect swallowing resulting in aspiration and biliary clearance, resulting in recurrent infections.

Patients with bronchiectasis are clinically characterised by a chronic, productive cough and infectious exacerbations. Bacterial colonisation is common and include *Pseudomonas aeruginosa*.¹⁻³ Recurrent infections lead to further damages and destruction of the pulmonary parenchyma, resulting in eventual respiratory failure and associated complications (pulmonary hypertension, cor pulmonale and progressive deterioration).

Patients should be compliant with postural pulmonary drainage, treatment, follow up and avoid any pulmonary risk factors such as smoking. Annual vaccinations (influenza and pneumococcal) are recommended. Infective exacerbations need to be treated promptly and adequately, and for some patients, long-term antimicrobial such macrolides may be considered.¹⁻³

REFERENCES

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