I'M BLEEDING AND AIR LEAKING FROM MY LUNG. A CASE REPORT ON MASSIVE HAEMOTHORAX IN A YOUNG, HEALTHY ADULT WITH SPONTANEOUS PNEUMOTHORAX AND BULLAE CHANGES FOLLOWING A TUBE THORACOSTOMY

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INTRODUCTION

While tube thoracostomy is a routine procedure in hospitals, it can occasionally lead to major bleeding issues. We recently managed a case of massive haemothorax following chest tube insertion for spontaneous pneumothorax in a healthy young male.

CASE PRESENTATION

A healthy 29-year-old Malay male, an active smoker, presented with sudden central chest pain, diaphoresis, palpitation, and dyspnoea lasting one day. Initial examination revealed stable vital signs, clear lung auscultation, and no respiratory distress, with oxygen saturation at 98% on room air. Chest X-ray revealed right pneumothorax and left tracheal deviation. Subsequent insertion of a right chest drain yielded 1.8 L of fresh blood within an hour, indicating massive haemothorax. CT angiography and CECT Thorax confirmed thoracic vascular injury with tortuous vessel enhancement and contrast extravasation within a hematoma in the right upper lobe's posterior segment. Additionally, bilateral apical bullae changes suggestive of chronic lung alterations were observed. The patient received 2 units of packed red blood cells and was transferred to a cardiothoracic centre for further management. He underwent successful right video-assisted thoracoscopic surgery (VATS) with clot evacuation, haemostasis, bullectomy, and pleurodesis, resulting in a full recovery and discharge from the ward.

DISCUSSION

In this case, immediate tube thoracostomy was essential to address tension pneumothorax. While bullae rupture can lead to vascular changes in surrounding lung tissue, typically manifesting as localized responses such as inflammation or, in severe cases, haemorrhage, these alterations are usually confined to the injury site. If abnormal vascular growth or anomalies are suspected in relation to bullae or underlying lung conditions, further evaluation with imaging techniques like CT angiography may be necessary. These modalities offer detailed insights into vascular changes, aiding tailored treatment strategies for patients with complex pulmonary conditions like bullae and associated vascular irregularities.

CONCLUSION

Managing pneumothorax caused by ruptured bullae entails navigating a heightened risk of complications, particularly bleeding. Therefore, prompt intervention and careful consideration are crucial to mitigate these risks and optimize patient outcomes.

KEYWORDS

Massive haemothorax, Bullae, Tube thoracostomy