№ 010

# Unveiling the Unexpected: A Rare Case of Hydropneumothorax Managed Conservatively

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## INTRODUCTION[1]

Hydropneumothorax, the simultaneous presence of air and fluid in the pleural space, arises from trauma, procedural complications, bronchopleural or esophagopleural fistulas, and infections. Management typically involves intercostal drainage. We report a case of conservatively managed hydropneumothorax in a 35-year-old woman who returned from Makkah with a one-week history of cough and fever.

## DISCUSSION[3]

Hydropneumothorax requires careful evaluation to avoid misdiagnosis as consolidation. Management varies from conservative therapy to surgical intervention, depending on severity. Infection including tuberculosis, is a frequent cause and can lead to significant morbidity. The presence of a pre-existing pneumothorax suggests an underlying predisposition, necessitating long-term follow-up to monitor progression and prevent recurrence.

## CONCLUSION[4]

This case underscores the importance of recognizing hydropneumothorax and highlights the efficacy of conservative management in selected patients. The detection of a pre-existing pneumothorax emphasizes the need for ongoing monitoring to assess underlying lung pathology and reduce recurrence risk.

KEYWORD: Hydropneumothorax

## CASE DESCRIPTION[2]

A 35-year-old nulliparous woman with no comorbidities presented with shortness of breath, preceded by fever and cough. She had received a broad-spectrum antibiotic at a private clinic but experienced worsening symptoms. Her sister, an Umrah companion, was hospitalized with pneumonia but tested negative for MERS-CoV.

On examination, auscultation revealed reduced air entry in the right lung. A chest radiograph revealed a right pneumothorax (2.5cm) with an air-fluid level, suggestive of pleural effusion and collapsed consolidation. Laboratory and infective markers were unremarkable.

Respiratory physician was consulted and initially considered Rocket chest drainage but abandoned it due to the lack of a safe puncture site based on ultrasound guided, minimizing the risk of parenchymal injury. The patient was admitted with nasal prong oxygen and broad-spectrum antibiotics. Serial chest radiographs showed resolution of pleural effusion and pneumothorax reduction (2.5cm to 1.5cm by day two). By day three, she was asymptomatic and had negative bacterial cultures. A prior chest radiograph (2023) revealed a pre-existing right pneumothorax (1.6 cm). She was discharged after five-days in stable condition.

A follow-up CT thorax one-month later revealed a persistent right pneumothorax, a right upper lobe bulla, and bilateral fibrosis. Tumour markers were normal. She remains under annual respiratory follow-up.

## REFERENCE[5]

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