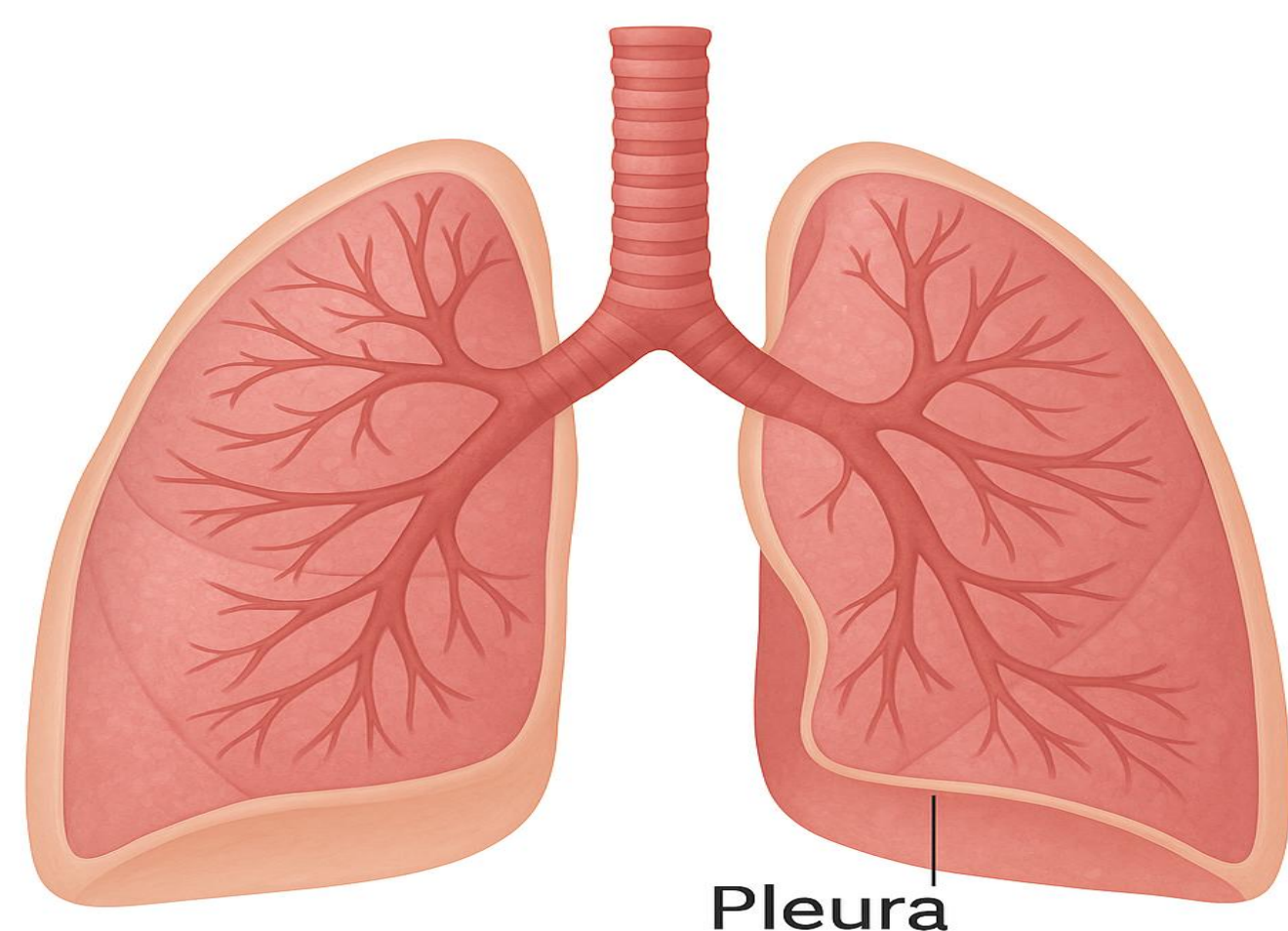


Pneumothorax Incidence in CPAP/NIV Patients With Chronic Lung Comorbidities



Introduction

CPAP/NIV widely used for respiratory failure. Barotrauma (including pneumothorax) is a rare but serious complication.

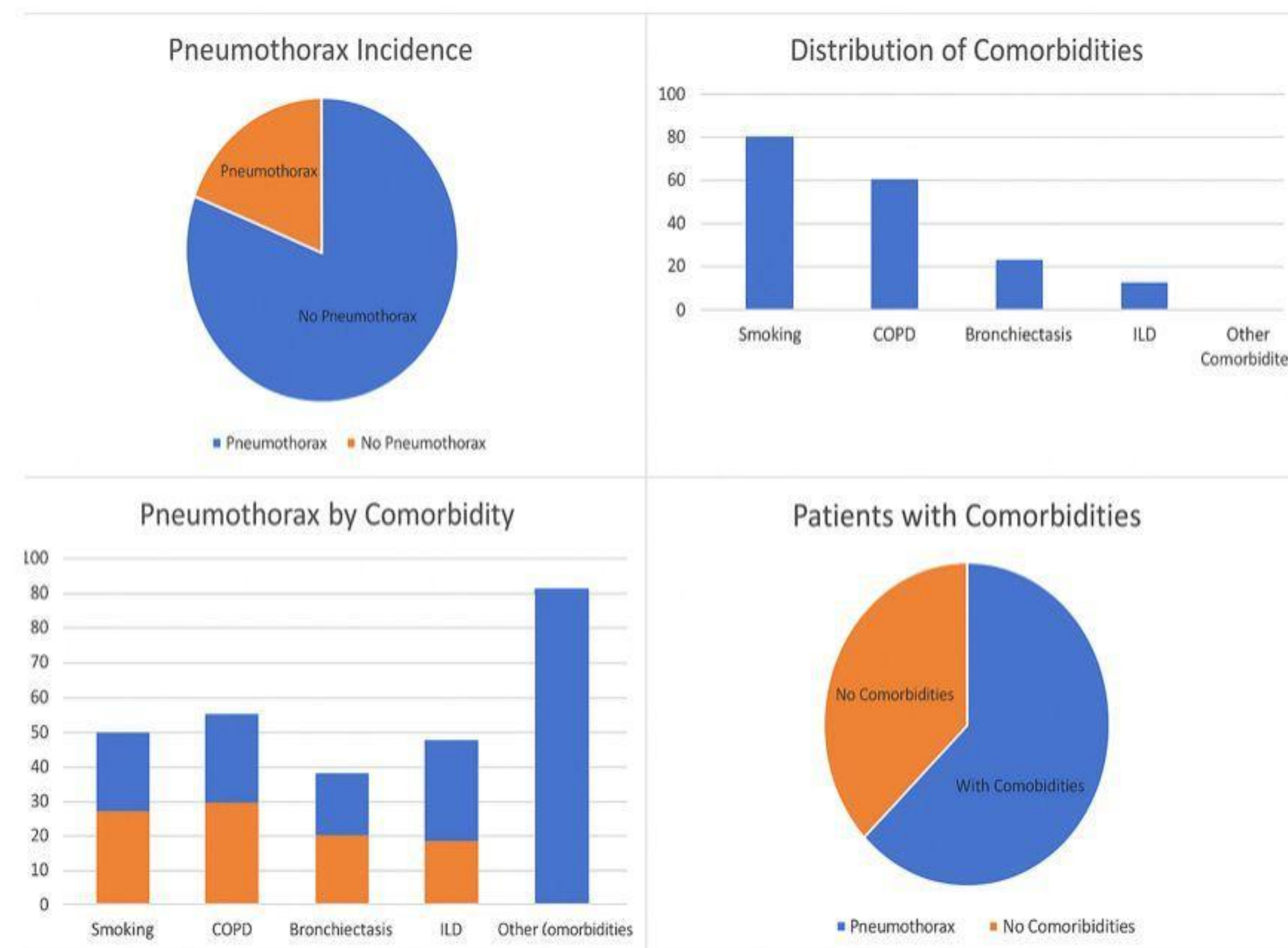
Aim: Evaluate incidence of pneumothorax in patients using (CPAP/NIV) with chronic lung comorbidities.

Methods

Retrospective review (2020–May 2025). 306 patients attended CPAP/NIV clinics (random sample) and acute patients. Data: smoking, COPD, bronchiectasis, ILD, emphysema and other comorbidities. Primary outcome: incidence of pneumothorax.

Key findings

- 306 patients
- 2 pneumothorax cases (0.6%)
- 66.3% had ≥ 1 comorbidity



Discussion

1-Pneumothorax rare despite a high burden of respiratory comorbidities. Most common risk factors in cohort: smoking and COPD.

2-Possible protective factors: standardized protocols, dedicated NIV nurses, structured clinics, optimized comorbidity management.

Conclusion

CPAP/NIV appear SAFE even in high-risk populations. Very low incidence of pneumothorax (0.6%). Protocol-driven care & structured follow-up are key.

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References: van den Biggelaar R, et al. (2023); European Respiratory Review (2023); European Respiratory Journal (2002); JAMA Internal Medicine (2013).