

Conference Abstract

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Exploring Sleep Disorders in Thoracic Surgery: A Prospective Study on Pre- and Postoperative Sleep Assessment

- [Veronica Rossi](#)
- [Eleonora Funaro](#)
- [Giovanni Spreafico](#)
- [Gianmarco Putti](#)
- [Orlandi Riccardo](#)
- [Degiovanni Sara](#)
- [Emilia Privitera](#)
- [Marco Mantero](#)
- [Alessandro Palleschi](#)
- [Eleonora Funaro](#)

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Abstract

Background: Sleep disorders are often underdiagnosed in patients undergoing lung resection (LR), with unclear effects on surgical outcomes.

Aims: To (1) assess sleep disorder prevalence before LR, (2) evaluate postoperative sleep changes, and (3) identify factors linked to sleep disturbances.

Methods: Adults scheduled for LR had a preoperative assessment, including pulmonary function tests (PFTs), ASA status, comorbidities, and therapies. Sleep was measured preoperatively and six months postoperatively using the Apnea-Hypopnea Index (AHI) and Epworth Sleepiness Scale (ESS). Physical activity and quality of life were assessed using the International Physical Activity Questionnaire (IPAQ) and the Short Form-36 (SF-36), respectively. Statistical analyses included Chi-square, Phi (ϕ), and Spearman's rank correlation (ρ).

Results: Among 23 patients (34.8% female, mean age 67.7 ± 12.5 years, BMI 25.8 ± 6.7), baseline PFTs showed percent predicted (pp)FEV1 $98.3 \pm 17.5\%$, ppFVC $105.1 \pm 15.1\%$, FEV1/FVC 0.73 ± 0.09 , ppDLCO $77.7 \pm 21\%$. Baseline AHI was 10.13 ± 9.10 events/h, ESS 5.2 ± 3.8 , with 47.8% (11/23) having undiagnosed sleep apnea (AHI >5). AHI correlated with high blood pressure ($\phi = 0.42$, $p = 0.046$), cardiovascular disease ($\phi = 0.42$, $p = 0.046$), and ASA status ($r = 0.64$, $p < 0.001$). Final postoperative data collection is ongoing; so far, postoperatively, 37.5% had worsened sleep, while 62.5% remained stable.

Conclusions: Preoperative sleep assessment can detect undiagnosed sleep disorders, providing a chance for optimization before LR. Many patients experience new or worsened sleep disturbances postoperatively. Further research will assess if targeted interventions improve recovery.

Footnotes

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