following Low suction to chest drains in pediatric population pulmonary resection Was it effective

Background: Residual pleural space and/or continuous air leaks are common implications following pulmonary resections that mandate prolonged chest drainage with subsequent longer hospital stay, and higher incidence of residual space infection.

Objective: In this study, we retrospectively studied the efficacy and safety of vacuum-assisted suction to chest drains in managing such problems after lung resections in children. A total of 92 patients who underwent pulmonary resections in Abo El-Rish and Fayoum University Hospitals between January 2019 and June 2023 were divided into 2 groups: group A, which included 47 patients with no suction, and group B, which included 45 patients with suction to their chest drains.

Results: Suction on chest drains in such patients significantly shortened the duration of both a postoperative need for chest drains (1.5 + 0.32 vs. 3.27 + 0.8 days in the no-suction group, P 0.0001) and in-hospital stays (3 + 1.5 vs. 6 + 1.5 days, P 0.0001). Despite a lower incidence of postoperative infection in the suction group (4.44% vs. 8.12%, P = 0.4726), the difference was not statistically significant.

Conclusion: Using suction on chest drains after lung resections in children may reduce morbidity and hospital costs by hastening the process of post-resection residual space-filling and serialization.