





THORACIC ULTRASOUND AS AN ALTERNATIVE TO RADIOGRAPHY IN THE POSTOPERATIVE MANAGEMENT OF THE PATIENT UNDERGOING PULMONARY RESECTION: PRELIMINARY DATA

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OBJECTIVE:

The use of thoracic ultrasound is explored as an alternative to chest radiography for postoperative management after pulmonary resection. This study aims to evaluate the validity of thoracic ultrasound compared to chest radiography as a standard post-surgical control.

METHODS:

This prospective, observational, single-center study involves patients undergoing lung resection. Each patient serves as their own control. Key variables include the type of resection, the presence of residual pneumothorax before and after drain removal, the duration of air leak, and demographic data. The study involves training with a Radiology service and deferred supervision. A minimum of 100 hemithoraces is targeted.

RESULTS:

Among 31 patients with a median BMI of 24.07 and a median FEV1 of 77%, ultrasound detected 15 cases of residual pneumothorax before pleural drain removal, compared to only 3 detected by radiography. Four cases were not assessable due to subcutaneous emphysema. After drain removal, ultrasound detect 15 cases, while radiography detected only 8. No significant difference between the two methods in detecting pneumothorax was found. Multivariate analysis found no relationship.

CONCLUSIONS:

Initial results suggest that thoracic ultrasound is a viable, effective, and safe alternative to chest radiography in managing thoracic drainage after pulmonary resection. Further results from the second phase will include cost analysis and final values.