primary studies - published RCT

Dornase alfa during lower respiratory tract infection post-lung transplantation: a randomized controlled trial.

Code: PM30632208 **Year:** 2019 **Date:** 2019 **Author:** Tarrant BJ

Study design (if review, criteria of inclusion for studies)

RCT

Participants

Inpatient adults with LRTI and abnormal sputum following bilateral sequential lung transplant (LTx)

Interventions

Participants received 5 ml of isotonic saline, or 2.5 ml of dornase alfa, nebulized once daily for 1 month followed by 2 months symptom diary.

Outcome measures

Primary outcome was lung clearance index (LCI2%). Secondary outcomes included spirometry, quality of life, readmission, length of stay, self-reported exacerbations, and adverse events at baseline, 1 and 3 months.

Main results

Thirty-two participated, 16 in each group, baseline mean (SD) FEV1 % 58 (22), median (IQR) length of stay 7 (5) days, time since LTx 3.49 (6.80) years. There were no significant between-group differences in LCI2% at any point (1 month mean difference -0.34, 95% confidence interval (CI) -1.57 to 0.89; 3 months -0.76, 95% CI -2.29 to 0.78, favoring dornase alfa). Secondary outcomes were not different between groups.

Authors' conclusions

These results do not support the routine use of dornase alfa during LRTI in LTx recipients.

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See also

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Keywords

Adolescent; Child; Deoxyribonuclease; Airway clearance drugs -expectorants- mucolytic- mucociliary-; hydration; Hypertonic Solutions; Infant; Inhalation OR nebulised; nebuliser; pharmacological_intervention; Respiratory System Agents; Dornase alpha; Pulmozyme; Lung Transplantation; transplantation; non pharmacological intervention - surg;