
primary studies - published RCT

Randomized trial of efficacy and safety of dornase alfa delivered by eRapid nebulizer in cystic fibrosis patients

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Author: Sawicki GS

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

Randomized crossover study

Participants

87 CF patients (≥ 6 years)

Interventions

dornase alfa 2.5mg/d in 2-week periods with the Pari eRapid and Pari LC Plus jet nebulizers.

Outcome measures

The primary end point was comparison of forced expiratory volume in the first second. Safety, quality of life, and treatment satisfaction/preference were also compared between devices.

Main results

Lung function was equivalent between nebulizers. Most domain scores from the Cystic Fibrosis Questionnaire-Revised and Treatment Satisfaction Questionnaire for Medication instruments were similar but patients strongly preferred the eRapid. Mean patient-reported administration times were shorter with the eRapid vs the LC Plus (2.7 vs 10.2min). Adverse events were similar between devices.

Authors' conclusions

Administration of dornase alfa via the eRapid nebulizer resulted in comparable efficacy and safety, shorter nebulization times, and higher patient preference.

<http://dx.doi.org/10.1016/j.jcf.2015.04.003>

See also

J Cyst Fibros. 2015 Nov;14(6):777-83. doi: 10.1016/j.jcf.2015.04.003. Epub 2015 Apr 25.

Keywords

Deoxyribonuclease; Airway clearance drugs -expectorants- mucolytic- mucociliary-; Inhalation OR nebulised; pharmacological_intervention; eRapid; nebuliser; non pharmacological intervention - devices OR physiotherapy; Respiratory System Agents; Dornase alpha; Pulmozyme; Pari;