primary studies - published RCT

The effect of discontinuing hypertonic saline or dornase alfa on mucociliary clearance in elexacaftor/tezacaftor/ivacaftor treated people with cystic fibrosis: The SIMPLIFY-MCC Study.

Code: PM38355350 **Year:** 2024 **Date:** **Author:** Donaldson SH

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

SIMPLIFY (randomized, open-label study) substudy

Participants

CF Patients â‰¥12 years of age.

Interventions

Discontinuing hypertonic saline (HS) or dornase alfa (DA) vs continuation of each treatment

Outcome measures

Change in lung function over a 6-week period. Authors used gamma scintigraphy to determine whether discontinuation of either HS or DA was associated with deterioration in the rate of in vivo mucociliary clearance (MCC)

Main results

While no significant differences in MCC endpoints were associated with HS discontinuation, significant improvement in whole and peripheral lung MCC was observed after discontinuing DA.

Authors' conclusions

These results suggest that pwCF on ETI with mild lung disease do not experience a subclinical deterioration in MCC that could later impact health outcomes after discontinuing HS, and in fact may benefit from improved MCC after stopping DA treatment.

http://dx.doi.org/10.1016/j.jcf.2024.02.003

See also

J Cyst Fibros. 2024 May;23(3):457-460. doi: 10.1016/j.jcf.2024.02.003. Epub 2024 Feb 13.

Keywords

Adolescent; Child; Deoxyribonuclease; Drug Administration Schedule; Airway clearance drugs -expectorants- mucolytic- mucociliary-; hydration; Hypertonic Solutions; Inhalation OR nebulised; nebuliser; non pharmacological intervention - devices OR physiotherapy; pharmacological_intervention; Recombinant Proteins; Respiratory System Agents; Dornase alpha; Pulmozyme; CFTR Modulators; Genetic Predisposition to Disease; placebo; VX-770; VX-661; ivacaftor; Aminophenols; tezacaftor; VX-445; elexacaftor; Trikafta; kaftrio;