

Cystic Fibrosis Research News

Title:

Randomized Trial of Efficacy and Safety of Dornase Alfa Delivered by eRapid Nebulizer in Cystic Fibrosis Patients

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What was your research question?

We ran this study to look at differences in health outcomes including lung function, quality of life, patient preference, and side effects when dornase alfa was delivered by an eRapid nebulizer compared to a conventional jet nebulizer system.

Why is this important?

Treatment burden in CF is high, and daily adherence to lifelong therapies can be challenging. Dornase alfa is recommended in guidelines as a therapy for many people with CF. The eRapid device is smaller, lighter, quieter, and easier to transport than a conventional jet nebulizer/air compressor system, but it has not yet been studied when delivering dornase alfa.

What did you do?

87 people with CF (aged 6 years and older) were put into two groups at random. One group received dornase alfa using the Pari eRapid device for two weeks and then switched to the Pari LC Plus jet nebulizer for a further two weeks. The second group started using the Pari LC Plus nebulizer for two weeks and then switched to the Pari eRapid device for the following



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two-week period. We compared lung function, quality of life, and treatment satisfaction between the periods when people used the different devices.

What did you find?

Lung function and quality of life did not change depending on which device was being used during the two-week treatment periods. People in the study strongly preferred the eRapid device. The time needed to administer dornase alfa was shorter with the eRapid compared to the LC Plus (on average 2.7 versus 10.2 minutes). There was no difference in the number of side effects reported depending on the device used.

What does this mean and reasons for caution?

Using dornase alfa via the eRapid nebulizer showed similar results for health outcomes, shorter nebulization times, and higher patient preference over a one-month period of time.

What's next?

Based on the results of this study, people with CF prescribed dornase alfa as a chronic respiratory medication could consider using the eRapid device.

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http://ac.els-cdn.com/S1569199315001034/1-s2.0-S1569199315001034-main.pdf?_tid=9fc5866c-107e-11e5-9325-0000aacb35d&acdnat=1434057353_c5f393524242dfe41eacea5d1be34479

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