Airway Clearance, why do we harp about it?

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We Are A TEAM

Watching for and discovering new symptoms early and working with the CF health care team on a plan of action are important ways to help keep your child as healthy as possible.
Three Major Causes of Lung Problems

1. Obstruction - airways become blocked with thick, sticky mucus.
2. Inflammation - airway become irritated and swollen.
3. Infection - germs or pathogens (bacteria, viruses or other microorganisms) grow and injure the airways.
Vicious Cycle of Lung Damage

Lung inflammation triggered

Inflammatory response ACTIVATED
- Mucus production
- Cellular defenses
- Chemical defenses

Pulmonary defenses ineffective: lung infection

Increased:
- Mucus production
- Inflammation

Mucus retained

Mucus plugging/airway obstruction

Lung damage
Mucociliary Clearance
How Do We Treat and Prevent Lung Damage?

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<th>Common Breathing Treatments</th>
<th>Common Airway Clearance</th>
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<td>Pulmozyme</td>
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<td>Antibiotics (TOBI, Cayston, Colistin)</td>
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When to do Airway Clearance

- After a breathing treatment
- Before eating
- Morning and evening
When to Increase Airway Clearance

- Increased coughing
- Increased mucus
- Change in the color or thickness of mucus
Controlled Coughing

- In order for coughing to do its job, it must be effective.
- Explosive, uncontrolled coughs do little for airway clearance.
- In fact, a violent cough can collapse the airways making mucus clearance much more difficult.
- Controlled coughing is not shallow; it comes from deep within your lungs to loosen and mobilize mucus.
Sit in a chair with both feet on the floor. Take a slow, deep breath through your mouth.

To exhale, open your mouth and make a “huff” sound in your throat. (This is the same way you might breathe to fog a mirror). Huff 3-4 times as you exhale. Rest and repeat as necessary.
Exercise to help Airway Clearance

- Exercise helps loosen mucus
- Coughing during or after exercise can get mucus out
- Exercise can help get air around mucus and help push it out
- Regular exercise increases endurance
Learning How to manage your child’s lung problems will help you:

- Maintain the best lung function possible in your child
- Reduce the number of respiratory infections your child gets
- Balance CF care with your family’s quality of life