



Transcript Details

This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/clinicians-roundtable/emerging-bronchoscopic-treatments-for-copd-a-review-of-clinical-trials/26395/

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Emerging Bronchoscopic Treatments for COPD: A Review of Clinical Trials

Announcer:

You're listening to *Clinician's Roundtable* on ReachMD. On this episode, Dr. Jonathan Kurman will discuss new technologies for bronchoscopic management of COPD. Dr. Kurman is an Assistant Professor of Medicine at the Medical College of Wisconsin and the Director of Interventional Pulmonology at the Froedtert and Medical College of Wisconsin Health Network. Here's Dr. Kurman now.

Dr. Kurman:

There are a bunch of bronchoscopic treatment modalities for COPD that are currently in the clinical trial phase. All of this started with bronchoscopic lung volume reduction using endobronchial valves. That is now FDA-approved standard of care endorsed by the GOLD guidelines with level A evidence and has set the stage for other bronchoscopic treatment modalities for COPD, which are still in the clinical trial phase, but I anticipate some of which will become commercially available in the near future. At this point, they include things like targeted lung denervation designed to reduce COPD exacerbation frequency; and bronchoscopic lung volume reduction completion, which is for patients who want bronchoscopic lung volume reduction but who are ineligible for it at this time due to the presence of collateral ventilation, which is airflow between lobes of the lung which will allow air to circumvent valves and prevent lobar atelectasis, which is the goal because that causes reduced hyperinflation. And then there are also two treatment modalities that are focused on chronic bronchitis: bronchial rheoplasty, which uses pulse electrical field energy, and metered spray cryotherapy, which uses cryotherapy. Both are designed to decrease goblet cell hyperplasia, which in turn will decrease mucous hyperproduction, which is the main pathology in patients with chronic bronchitis. All of the current treatment modalities for chronic bronchitis are the same as patients who have emphysema, but in patients who have chronic bronchitis, it is truly a different pathology and different physiology that is causing them to be symptomatic.

These procedural modalities are all being studied in ongoing clinical trials. You have the AIRFLOW-3 clinical trial, which is looking at targeted lung denervation, and what that does is it disrupts inappropriate signaling between the brain and the lungs that perpetuate or initiate COPD exacerbations. Currently, we are using long-acting muscarinic antagonists, LAMAs, which are inhaled medications designed to reduce anticholinergic activity in the lungs. Think of targeted lung denervation as a continuous LAMA or a continuous anticholinergic intervention.

The next clinical trial that is ongoing is called CONVERT II. This is the follow-up study to CONVERT I, which was exclusively done at centers outside of the U.S. This one is including US centers as well. And this is using a product called AeriSeal, which is a product that is instilled bronchoscopically, and it forms a sealant in the airways where there are collateral ventilation channels, which are disruptions in the fissure integrity of the lobe, and that allows valves to subsequently be placed for bronchoscopic lung volume reduction.

And then the two trials that are focusing on chronic bronchitis are the spray chronic bronchitis trial, SPRAY-CB. That is using metered-spray cryotherapy. And then you also have the RESOLVE clinical trial, which is using pulsed electrical field energy to disrupt goblet cell hyperplasia. So SPRAY-CB and the RESOLVE clinical trials are, again, both focusing on chronic bronchitis using different modalities to decrease the number and size of goblet cells, and all of these trials involve one to two treatments.

And as more and more of these bronchoscopic treatment modalities become available, I anticipate the whole COPD treatment paradigm will shift. No longer will we be relegated to just standard bronchodilators. Now we'll have a combination of different biologic agents as well as bronchoscopic procedural interventions, and together I think we can really make significant strides in COPD management.

Announcer:





That was Dr. Jonathan Kurman discussing new technologies for bronchoscopic management of COPD. To access this and other episodes in our series, visit *Clinician's Roundtable* on ReachMD.com, where you can Be Part of the Knowledge. Thanks for listening!