

Transcript Details

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Causes and Outcomes of Bronchiectasis Exacerbations

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You're listening to ReachMD. This medical industry feature, titled "Causes and Outcomes of Bronchiectasis Exacerbations" is sponsored by Insmed. Here's Dr. Colin Swenson.

Dr. Swenson:

It's also important to remember that there are a number of factors that can cause or trigger an exacerbation of bronchiectasis. For instance, viral infections, bacterial overgrowth. I practice in the Atlanta metro region. Sometimes the air pollution counts are rather high. The Canadian wildfires that we had can sometimes trigger an exacerbation and that really results in that overgrowth, increased mucus production, bacterial overgrowth and sort of that inflammatory cascade.¹

Dr. Khabbaza:

Yeah, so when you have bacteria that are hanging out or colonizing in airways that recruits neutrophils to our airways.² So people who are colonized likely have some degree of neutrophilic inflammation at baseline that accounts for their slight cough or whatever their baseline respiratory symptoms might be. But during an exacerbation, when that bacteria overgrowth occurs, more neutrophils are recruited and then that intensifies that neutrophilic inflammation in most of these people.² And I think the deeper that goes on before it's identified and treated, the more injury the airways have and then the more repair that's needed and the more remodeling that can occur.² That's going to deteriorate the airflow in your lungs, so a lot of people's spirometry does worsen gradually with each exacerbation.³

Dr. Swenson:

And it's important to note that the bronchiectasis by definition is not reversible, particularly in the adult population. So we want to prevent that remodeling that occurs during exacerbation.² Once that airway is bronchiectatic, we're not going to be able to get that back to normal shape and function. And so preventing the exacerbation can really help prevent that remodeling cascade.^{2,4}

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This program was sponsored by Insmed. If you missed any part of this discussion, visit Industry Features on ReachMD.com, where you can Be Part of the Knowledge.

References:

- 1. Choi H, Chalmers JD. Bronchiectasis exacerbation: a narrative review of causes, risk factors, management and prevention. *Ann Transl Med.* 2023;11(1):25.
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- 4. Amati F, Simonetta E, Gramegna A, et al. The biology of pulmonary exacerbations in bronchiectasis. *Eur Respir Rev.* 2019;28(154):190055.

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