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/deep-breaths-updates-chest/impacts-of-patients-underreporting-copd-exacerbations/11494/

ReachMD
www.reachmd.com
info@reachmd.com
(866) 423-7849

Impacts of Patients Underreporting COPD Exacerbations

Announcer:
You're listening to Deep Breaths: Updates from CHEST on ReachMD. This series is produced in partnership with the American College of CHEST Physicians.

And, here is your host Dr. Tom Corbridge, who is an Emeritus physician and Adjunct Professor of Medicine at Northwestern in Chicago, IL. And, a respiratory medical expert in US medical affairs at GlaxoSmithKline.

Dr. Corbridge:
With approximately 16 million patients currently diagnosed with COPD in the United States, and many millions more who have not been diagnosed, staying up to date with the best management strategies is essential, especially since these patients are faced with a number of debilitating effects. So how could we provide the best care for these patients?

Welcome to *Deep Breaths: Updates from CHEST* on ReachMD. I'm Dr. Tom Corbridge, and with me today is a good friend, colleague, and internationally recognized expert, Dr. Gary Ferguson. Gary is Director of the Pulmonary Research Institute of Southeast Michigan, and a Clinical Professor of Medicine at Michigan State University. Gary, welcome to the program.

Dr. Ferguson:
Thanks Tom. I'm delighted to be here.

Dr. Corbridge:
So Gary and I will be reviewing key points from a live presentation that we gave at CHEST 2019 that focuses on the management of COPD using the Treatable Traits approach that has been recommended by the Global Initiative for Obstructive Lung Disease, or GOLD report.

So Gary, I wanted you to start by telling us about why we have moved away from spirometry, and specifically the FEV1, to guide management.

Dr. Ferguson:
First of all, I would really want to highlight that even though the treatment algorithm and discussion of what we do with our patients on a day-to-day, or over time, basis is moved more to what we call these treatable traits, spirometry is still essential. You have to do spirometry to make the diagnosis of COPD. You have value in knowing the severity of the spirometry. And in addition to that, it helps deal with the fact that sometimes patients are misdiagnosed. But coming back to your point about FEV1, and in particular with the spirometry and why we have moved away from that, what's happened is that a lot of studies have shown that a lot of the outcomes that we look at for patients, whether in studies or in clinical practice, really tend to occur across the spectrum of patients with FEV1. In other words, a very severe patient and a moderate, or even a mild patient, can get responses to bronchodilators, and/or have changes in exacerbations or other outcomes, and so it really was not a perfect tool. It gave us great, broad outcomes in terms of groups, but when we brought it down to that precision level of "What do I need to do for my patient?", it really was not a great tool for us, so we started looking at these other treatable traits, and those were much better. We saw that FEV1 did not, in fact, correlate great on number-by-number basis with a group of patients' quality of life, or even their dyspnea or exercise capacity. So, this is trying to move it to that next level, to both respond to our patients' concerns, symptoms, and needs, but also to come up with an algorithm that actually responds and meets those precision-types of things that we want for our patients.

Dr. Corbridge:
Well, music to my ears that the FEV1 remains important in COPD. But because of limitations that you just reviewed, GOLD has

pushed us to looking at symptoms and exacerbations, not only to choose the initial maintenance therapy, but also to guide pharmacologic treatment in follow-up. But this raises another problem, which is that patients may underreport their symptoms, and even their exacerbation history. So tell us more about that.

Dr. Ferguson:
You know, that's a huge issue, and there's many reasons for it. The simplest is that a lot of our symptoms for COPD are pretty common. And so, we have a rationalization for why some of these things that are going on are just normal, as opposed to majorly part of a disease. And then, we don't have a simple tool that you can mark, like some diseases, that's an "Aha – I'm abnormal," and as a result, they go along with the flow and it's usually not until some bad event, an exacerbation or even worse, happens where it suddenly comes to the forefront as "Oh, you do have more."

But it's not just the patients. You and I have been in clinical practice. You're a primary care doctor, even a pulmonary doc, and you're very busy in your practice. I think that we, as practitioners, miss those signs and those symptoms and those opportunities as well, so what are your thoughts on that?

Dr. Corbridge:
Well, Gary, that's a really good point, because if patients underreport where they are, that certainly sets health care providers up for potentially under-recognizing where patients truly are in terms of symptoms and exacerbations. And this has consequences, cause it could delay the initiation of appropriate therapy or result in suboptimal therapy. And this matters, because symptoms are associated with worse quality of life, worse psychological functioning and mortality, and under-recognizing exacerbation risk also has important consequences. So physicians must be aware that this is a potential problem and really do their due diligence. Ask good, probing questions to understand where their patients are. So, not just questions like "How are you today?" but, you know, "Are you still able to climb stairs?" or "Can you still walk down to the mailbox?" "How are you keeping up with your peers, if you're walking?" More probing questions can help in this regard. But it also underscores the utility of using validated tools. For instance, the Modified Medical Research Council (MMRC) scale of breathlessness is very helpful to properly catalog where patients are, and/or the COPD Assessment Test, the CAT to help assess symptoms.

Dr. Ferguson:
Yeah, those are great points. The CAT, the MMRC, I think these are really critical. For me, they help guide how my patients are doing in terms of how is their CAT score changing, but they can be great tools to identify these patients. And I think this is a critical thing that we all have to face if we're gonna actually attack this leading cause of death in the United States.

Dr. Corbridge:
For those of you just tuning in, you are listening to *Deep Breaths: Updates from CHEST*, on ReachMD. I'm Dr. Tom Corbridge, and here with me today is Dr. Gary Ferguson. Together, we're talking about key management strategies for patients with COPD.

Dr. Ferguson:
So let's delve a little bit more into symptoms, exacerbations, those types of things. Why are those important?

Dr. Corbridge:
Well recognizing where patients truly are in symptoms and exacerbations leads, right into appropriately managing them, and if we start with managing the treatable trait of symptoms, I think breathlessness is the most common symptom in patients with COPD. Breathlessness is a complex symptom. It has multi-factorial origins. One of the key mechanisms of breathlessness is lung hyperinflation. Lung hyperinflation is defined as an increase in expiratory lung volumes that is a consequence of decreased lung elastic recoil and air trapping. Lung hyperinflation occurs at rest, but it clearly worsens with exercise and increasing respiratory rates, which decrease expiratory time. So foundational management of symptoms, particularly dyspnea, is through bronchodilator medications. All classes of bronchodilators can improve lung hyperinflation. And for maintenance therapy, we're talking about prescribing daily long-acting bronchodilators to help improve dyspnea. And this should be combined with pulmonary rehabilitation and exercise program to achieve best outcomes. Now we do know that combining bronchodilators with complimentary mechanisms of action, for instance combining a LAMA with a LABA, is particularly effective. Dual bronchodilators improve lung volumes, exercise tolerance of spirometry, such as the FEV1, and dyspnea, more than their mono-components. So, for that treatable trait, it's all about optimizing bronchodilation and ensuring pulmonary rehab.

Dr. Corbridge:
So let's now switch to consideration of the other treatable trait, or exacerbations, and Gary, I'm gonna have you go through this for us.

Dr. Ferguson:
Sure. So, first of all, let's talk about why are we worried about exacerbations? The bottom line is that they have significant risk to our

patients. As an example, moderate exacerbations require antibiotics and steroids. We know that if people have that event, they are more likely to have another event. They're more likely to have declines in lung function. Their quality of life goes down. So they have a lot of bad outcomes from there. And then, we've now learning that even patients that have "mild exacerbations," which are patients that don't have necessarily health care intervention, with antibiotics or steroids or hospitalization, but they're just having worsening symptoms, that those, in fact, have major impacts on patients' quality of life function and future exacerbation risk. And then if you move to the other extreme, which is the severe exacerbation, the person who ends up in the hospital, that's a profound problem. If you look at some of the data, about 10% of patients who are hospitalized for COPD will have another hospitalization within 30 or 90 days. 25% of them will die in one year. 50% of them will be dead within 3-4 years. So we have profound impacts on our patients at that level, in addition to their effects on quality of life and function.

Then let's talk about well, how do we find these people? And I think that's another big problem we have, is that we don't identify these people well. People don't really understand or recognize COPD exacerbations. We call them many different things: acute bronchitis, chest colds, many other things, and don't really recognize that it's actually an exacerbation in association with COPD. And so, as a result, they may not ever even get this recognized or counted. Then when we look at patients who have had any exacerbations, do they report them? And the short answer is no, the data would suggest that two-thirds of COPD exacerbations are not reported. And why is that important? Because we know that if you don't recognize that exacerbations are occurring, you can't recognize it as a risk factor for this damage to the patient, and therefore we do nothing about it.

So that, then, begs the question, how do we determine who's at risk? The best predictor is a prior history of exacerbations. If you've had a moderate or severe exacerbation, that means the antibiotics, steroids, or hospitalization in the last year, you're twice as likely to have one this year. If you had two in the last year, you're six times more likely to have one this year. Now, unfortunately, it isn't always that simple, because this disease isn't uniform year to year to year. So, we look at other things. One of the things we know about is lung function. We earlier talked about lung function and why it doesn't necessarily link up. We do know that as you are more severe, you are more likely to have frequent exacerbations. That's critically important, so knowing the lung function helps you with that. One of the other things that we've learned about more recently is eosinophils, and we have some data that would certainly suggest that in patients that have higher numbers of eosinophils, say above 300 cells for, cubic millimeter, that population has an increased risk of exacerbations. So instead of waiting till they have that bad exacerbation, they in fact, now actually can be identified as at risk, and we can do something to prevent them, just like we do with heart attacks and strokes.

Certainly, we want smoking cessation. Vaccinations, as appropriate. But then we have all these bronchodilators, and bronchodilators have been shown to reduce exacerbations. But one of the big tools within that is inhaled corticosteroids. The role of inhaled corticosteroids in conjunction with good long-acting bronchodilators becomes essential in preventing consequences of exacerbations. In fact, we now have good studies that show that if you put patients on a triple therapy, with an inhaled corticosteroid and good bronchodilators, that they will have less future exacerbations. So it becomes a very effective preventive tool. And by doing this whole combination, and asking a few basic questions, we can hopefully change the outcomes of this disease.

Dr. Corbridge:
Thank you, Gary, for reviewing the exacerbations. Unfortunately, we're almost out of time today. So Gary, before we wrap up, are there any last takeaways that you'd like to share with the audience?

Dr. Ferguson:
I think I would just start with the notion of symptoms matter. So these treatable traits really do matter. And that means that weas clinicians, have to take a little bit of time and ask the right questions. From an exacerbation standpoint, taking the time to first make the diagnosis of COPD. If you don't make the diagnosis of COPD, you can't have an exacerbation. But once you've made that diagnosis of COPD, start looking for these events, and then realize that we have to change our algorithm to think about prevention, not just responding to acute complaints, more symptoms, more exacerbations, but doing things to prevent. And I think if we really focus on that, that is our best chance of actually having positive outcomes for this disease.

Dr. Corbridge:
Thank you. From my point of view, I'm really struck by the importance of patient underreporting of both their symptoms and their past exacerbations, and that potentially leading to the under-recognition of where a patient truly is. And so, asking more probing questions or using validated scales, such as MMRC or CAT, really do have a significant importance in the management of these patients.

So that brings us to the end of today's discussion. I really want to thank Dr. Gary Ferguson for joining me today to review this very important information for clinicians who manage these patients. Gary, it was great speaking with you, as always.

Dr. Ferguson:
Thank you.

Announcer:
This was *Deep Breaths: Updates from CHEST* produced in partnership with the American College of Chest Physicians. To access other episodes of this series, visit ReachMD.com/CHEST, where you can be part of the knowledge. Thanks for listening!