SPEAKER:

COPD patients, in many setting, complains of cough, sputum production, shortness of breath. And clinical symptoms on pulmonary MAC is pretty similar. So they have the same symptoms. The most important things is having high suspicious for the disease and screen patients whenever that indicated. I make it very simple for you.

What I would recommend for those screening-- one, if you have COPD patients with gold class three and four, particularly with four, that have one COPD exacerbation admitted in the hospital, or two exacerbations that not admitted, but in outpatient treated with antibiotics in the last four months, those patients should be screened for NTM with a sputum test for AFB, induce a sputum, or if there is any opacity in the lung, with bronchoscopy.

Another setting that is important for COPD patients. If you have any screening with CT scan and you finded out is micronodular opacity in the lung? Or sometimes there is tree-in-buds, then request your sputum test. That is one of the indication to be checked for NTM.

Although, all this you should remember, diagnosis doesn't mean starting treatment. For NTM treatment, you should have fulfilled criteria for American Thoracic Society and IDSA 2007. That includes, one, having two sputum for the same strain of NTM. That means, if the first one is MAC, second time should be MAC again. You should have pathology or evidence in tissue if the patient cannot produce any sputum.

You should have evidence in CT scan or imaging that including any type of opacity in the lung, and obviously, should be new change compared to previous one. And third one should have some symptoms. Although, always for the symptoms, I put my question mark-- because many a patient with chronic lung disease-- always they have symptoms. So three important thing going to fill out your criteria for diagnosis. But who should be treated?

For the treatment for MAC or NTM disease for any patients with any underlying disease, you should be considered if the patient does have significant symptoms, increased compared to the baseline of underlying disorder. For example, if your patient does have bronchiectasis, and right now produce more phlegm, more colors, shortness of breath, and systemic symptoms, in that case you should start treatment.

If your patient does have cavitary lesion that is seen in CT images or chest X-ray, I would suggest to start treatment. Cavitary lesion means destruction in the lung. Means a hole that is not going to be repaired in many cases. Another case that you need to start treatment is the patient that does have significant damage in the lung, and right now in your breathing tests-- PFDs and other pulmonary conditions-- you find that there is significant advancing your symptoms.

For example, you have a COPD patient with PFD, showing severe obstruction, and right now after three or six months, the amounts of reserve in the lung significantly decreased. That should be treated in another case. Another setting that I would suggest for treatment is COPD patients or any chronic lung disease that you are considering lung transplant.

At this point we don't have good data to supporting what should be treated and when you should start treatment for the patient with advanced disease and needs treatment for lung transplant. I would suggest start as soon as possible for any patient that is candidate for lung transplant, before getting lung transplant. Because NTM after lung transplant, significantly increase damaging the lung-- that is new lung-- and increased failure and also mortality.