

CHIEF COMPLAINT

COPD

COMMENTS TO SPECIALIST

79-year-old female with COPD, Congestive Heart Failure (CHF), pulmonary hypertension, Peripheral Vascular Disease (PVD), lymphedema, Gastroesophageal Reflux Disease (GERD), Stage 4 Chronic Kidney Disease (CKD4), hyperlipidemia, and gout.

She has recurrent COPD exacerbations and is treated with Prednisone 40 mg po daily for 5 days. Received 40 mg of prednisone on Monday, 20 mg on Tuesday, 20 mg on Wednesday, and 40 mg today. She is chronically on Pulmicort nebulizer 0.5 bid and Duoneb qid. Recently, she began Z-pack treatment. She has increased congestion, wheezing, productive cough, thick green sputum, and shortness of breath with conversation.

Her O2 saturation is 90% baseline with O2 at 4L at night. Chest X-ray was negative. She continues to have shortness of breath with wheezes and rhonchi noted. Tight cough is productive of thick green/brown sputum. The patient was treated in Jan with 5 days of prednisone and Augmentin. Her symptoms improved slightly but have once again exacerbated.

MAIN QUESTION

- Should doxycycline be added despite a negative chest x-ray but with coarse wheezes and rhonchi to oscillation?
- Would Acetylcysteine in the short term be more beneficial in helping her to expect and improve symptoms?
- Recommendations to better manage her end-stage COPD since she is unable to use inhalers?

Specialist Response**SUMMARY**

Treatment options are available at the primary care level.

DETAILS

There is little benefit to adding doxycycline to azithromycin given that they have such similar spectrums of coverage. For persistent sputum production after azithromycin, he recommended escalating to an oral cephalosporin such as PO Vantin for 7 days. Dr Thakkar had additional questions and recommendations:

- Would it be possible to obtain a sputum culture and gram stain and ensure we are not dealing with a chronic pseudomonas infection?
- Concerns that she may have sinusitis?
- I agree with the idea of adding nebulized Mucomyst (acetylcysteine) for a few days, but I generally recommend shying away from prolonged durations of that drug as it can cause airway irritation and bronchospasm.
- Is she a high aspiration risk? Do we need to worry about anaerobes (which are not well covered by either azithromycin or doxycycline)?
- Any concerns for ABPA (allergic bronchopulmonary aspergillosis) or invasive fungal infection? It may be beneficial to check a galactomannan assay and aspergillus antibodies.
- Concerns about MAI (mycobacterium avium infection)? If so, send 3 serial sputum AFBs, given her underlying lung disease history.

Thank you for the courtesy of this consultation.