The optimal management of patients with COPD

Chronic obstructive pulmonary disease (COPD) affects approximately one in seven New Zealanders aged over 40 years. It is almost entirely preventable as more than 85% of cases are caused by tobacco smoking.

Consider a clinical diagnosis of COPD in anyone aged over 35 years who has had long-term exposure to cigarette smoke, noxious particulates or fumes, or who has consistent breathlessness, cough, and/or sputum production. Spirometry is required to confirm a diagnosis, however, the results are not disease specific, e.g. spirometry may not be able to differentiate between COPD, chronic bronchitis or asthma. Spirometry can be reliably performed in primary care, although training is required. Screening for COPD is not recommended.

Smoking cessation, regular exercise and annual influenza vaccination can slow COPD progression. Pharmacological treatment aims to provide symptom control and reduce the patient's exacerbation risk.

For all patients with COPD prescribe an inhaled short-acting beta2-agonist (SABA) or a short-acting muscarinic antagonist (SAMA). For patients with COPD and persistent and troublesome dyspnoea, consider adding a long-acting beta2-agonist (LABA) or a long-acting muscarinic receptor antagonist (LAMA). For patients with an FEV_1 < 50% of predicted and two or more exacerbations in a 12-month period, consider prescribing a fixed-dose inhaled corticosteroid, in combination with a LABA. However, it is important to be mindful of the increased risk of pneumonia and other respiratory co-morbidities associated with the use of inhaled corticosteroids in patients with COPD. As the patient's lung function is expected to decline, routine follow-up is important. The success of treatment should be largely determined by the patient's response as improvements in lung function may not be detected on spirometry. Education on the correct use of inhalers is important as only 10% of patients with COPD may be using their devices correctly.

Prompt treatment of COPD exacerbations is crucial; a delay of greater than 24 hours in presentation approximately doubles the likelihood of hospital admission. Prednisone 30 – 50 mg, once daily in the morning, for five days, can be prescribed for moderate or severe exacerbations. Prescribing corticosteroids for 14 days for COPD exacerbations is no longer considered necessary. If patients show clinical signs of infection they can be prescribed oral antibiotics for five to ten days. Recommended treatments include: amoxicillin, 500 mg, three times daily or doxycycline, 100 mg, twice daily. Sputum culture is not routinely required unless the patient is not responding to antibiotic treatment or has had multiple infections over a period of months.

Weight loss is common in people with advanced COPD and adequate nutritional intake is important to support the extra energy requirements of breathing. Low-dose morphine, benzodiazepines, and eventually oxygen, may be appropriate for patients whose lung function cannot be improved.

Realistic advice and support from health professionals is important for patients with COPD to make informed decisions about end-of-life care. It is best that these discussions take place early to allow sufficient time, e.g. 12 months, for patients and their family/whanau to plan how they would like their care to be managed.

Peer group discussion points:

1. What is your approach to managing patients who have been recently diagnosed with COPD but are reluctant to make lifestyle changes, e.g. smoking cessation and exercise?
2. Have you encountered any patients with COPD where the cause was not exposure to tobacco smoke, and if so, what was identified as the cause?
3. Do you consider the risk of pneumonia when prescribing inhaled corticosteroids to patients with COPD and is this something you have ever discussed with a respiratory physician?
4. Were you aware that five day courses of corticosteroids, as opposed to 14 days, are now recommended for the management of COPD exacerbations?
5. End-of-life discussions are difficult. What are your strategies for raising this subject? Do you think patients benefit from having these discussions early?

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