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ELDER CARE

A Resource for Providers



COPD - Special Considerations for Older Adults

Chronic obstructive lung disease (COPD) is the fourth leading cause of death among older adults, following heart disease, cancer, and stroke. Care of older adults with COPD is complicated by the fact that up to 2/3 of these patients have other medical problems that may be affected by the medications used to treat their lung disease.

This edition of Eldercare will review some of the interactions between treatments for COPD and treatments for two of the most chronic medical problems in older adults - heart disease and diabetes (Table 1). Please note that this review focuses on patients with stable COPD in outpatient settings, and does not apply to acutely ill or hospitalized patients.

Heart Disease

Most common cardiac medications (angiotensin converting enzyme inhibitors, angiotensin receptor blockers, nitrates, calcium blockers, and diuretics) are considered safe for patients with COPD. Concern exists, however, regarding both the safety of beta blocker use for the treatment of heart disease in COPD patients, and conversely, about prescribing inhaled long-acting beta agonists for treatment of COPD in patients with heart disease.

Beta Blockers As discussed in the referenced Cochrane Review, studies have shown that cardioselective beta blockers (Table 2), when indicated for cardiac conditions, can be safely prescribed to patients who have COPD, without increasing airway obstruction or reducing the response to bronchodilators. Studies of beta blocker therapy for patients with COPD, however, have generally only been short-term (≤ 3 months), and physicians should

continue to follow patients over time for any decline in pulmonary status.

Long-Acting Beta Agonists While patients with acute exacerbations of COPD may require treatment with short-acting beta-agonists, regardless of the presence of heart disease, the safety of inhaled long-acting beta agonists for outpatients with COPD and heart disease is uncertain. Long-acting beta agonist therapy appears to be safe overall for patients with COPD alone, especially when combined with inhaled corticosteroids, but there are no good safety data on patients with COPD and known heart disease. Because safety data are limited, these drugs should be used with caution, if at all, for patients with both COPD and heart disease.

Diabetes

COPD patients with diabetes can present with side effects related to the various steroid treatments for COPD. As we all know, even short-term oral steroid use can disrupt diabetic glucose control, and close follow up is paramount during treatment. Additionally, an important but less well known fact is that inhaled steroids can exacerbate diabetic eye disease.

Inhaled Steroids Patients with diabetes are at increased risk of cataracts. This risk is further increased (by 10% to 60%) when patients also use long-term inhaled steroids. Glaucoma also occurs in diabetes, and the risk of this disease is increased by about 40% when people with a family history of glaucoma take chronic inhaled steroids. While these risks do not preclude the use of inhaled steroids for patients with COPD, regular surveillance eye exams are essential in this population.

TIPS FOR TREATING OLDER PATIENTS WHO HAVE COPD AND HEART DISEASES OR DIABETES

- Don't withhold beta blocker therapy from patients with COPD if they have a clear indication for such therapy – but choose a cardioselective beta blocker and monitor patients for abrupt changes in pulmonary status after treatment is started.
- Be cautious about prescribing long-acting beta agonists for COPD treatment when patients also have heart disease, because there are limited data to support the safety of such treatment.
- Monitor for cataracts and glaucoma when patients with diabetes receive long-term inhaled steroids.

Table 1.
Concerns About Medications for Patients with Stable COPD Who Also Have Heart Disease or Diabetes

Medication	Concern	Safety	Comment
Beta Blockers	Beta blockers prescribed for cardiac indications may increase airway obstruction in patients with COPD	Generally safe for patients with COPD in studies lasting up to 3 months	Safety applies only to cardio-selective beta blockers (Table 2)
Long-Acting Beta Agonists	Long-acting beta agonists cause tachycardia and increase cardiac work, which is undesirable in patients with heart disease	Uncertain. Studies have evaluated safety in patients with COPD, but not specifically patients with COPD and heart disease.	Use with caution, if at all
Inhaled Steroids	May increase risk of cataracts and glaucoma, for which patients with diabetes are already at increased risk	Increased risk confirmed	Patients with diabetes should undergo annual eye exams. Importance of exams is increased in patients receiving inhaled steroids.

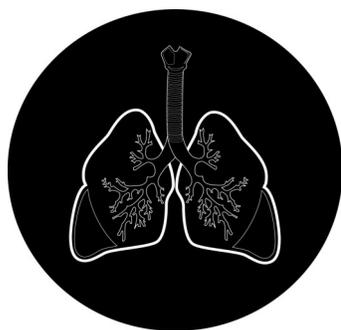


Table 2. Cardioselective Beta Blockers

Acebutolol	Esmolol
Atenolol	Metoprolol
Betaxolol	Nebivolol
Bisoprolol	



References and Resources

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