Data Reassure on Long-Acting β-Agonists

BY BRUCE JANCIN
Denver Bureau

SALT LAKE CITY — Reassurance about the cardiovascular safety of long-acting β_2-agonists in patients with chronic obstructive pulmonary disease was provided by a large study presented at the annual meeting of the American College of Chest Physicians.

Sarika S. Ogale presented a nested case-control study involving 104,459 predominantly elderly male patients with newly diagnosed COPD in the national Department of Veterans Affairs database. During an average follow-up of 1.5 years and a maximum of 5.8 years, 6,954 of the patients were hospitalized for acute coronary syndrome, heart failure, or cardiac arrhythmia. Heart failure was the primary admitting diagnosis in nearly 3,100 patients, with the remainder being split roughly equally between ACS and arrhythmia. The control group consisted of 34,770 VA patients matched for age and duration of COPD.

After adjustment for COPD severity, use of other medications, cardiovascular risk factor profiles, and other factors, the cardiovascular event rate in COPD patients who had ever used long-acting β-agonists (LABAs) proved to be virtually identical to that in never users, according to Ms. Ogale, a graduate student in the pharmaceutical outcomes research program at the University of Washington, Seattle. ■

Statins May Slow Smokers' Lung Ailments

BY BRUCE JANCIN
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SALT LAKE CITY — Statin therapy may slow the decline in lung function in smokers and ex-smokers with chronic lung disease, Dr. Walid G. Younis said at the annual meeting of the American College of Chest Physicians.

This preliminary finding from a retrospective observational study raises the intriguing possibility that statins might be able to prevent or at least slow progression of chronic obstructive pulmonary disease (COPD) or restrictive lung disease in smokers and former smokers, noted Dr. Younis of the University of Oklahoma, Oklahoma City.

He reported on 182 current and 303 ex-smokers, mean age 66 years, being followed at the Oklahoma City Veterans

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Hospital. Half were on statin therapy—predominantly simvastatin—for primary or secondary cardiovascular prevention. A total of 319 patients had COPD, 99 patients had restrictive fibrotic lung disease, and the remainder still had normal lung function.

The mean baseline forced expiratory volume in 1 second (FEV_1) was 57% of the predicted value. During nearly 3 years of follow-up, FEV_1 declined by 88 mL/year in patients not on a statin but by only 12 mL/year in those who were. Moreover, forced vital capacity decreased by 125 mL/year in patients not on a statin while actually increasing by 22 mL/year in those on statin therapy. Equally robust benefits on lung function were noted in statin users regardless of whether they were current or ex-smokers.

The rate of respiratory-related hospitalizations and emergency department visits during the study period was 35% lower in COPD patients on a statin. However, statin therapy had no impact on the rates in patients with restrictive lung disease.

The most likely mechanism of statin therapy's benefits on lung function involve anti-inflammatory effects. Statins decrease blood levels of inflammatory cytokines, including interleukin-6 and -8 and tumor necrosis factor–α, which are known to be involved in the pathogenesis of COPD, Dr. Younis said.

"I think this is provocative enough that you should think seriously about doing a well-designed randomized prospective trial to address the question of whether this is going to be an important intervention," said Dr. Ronald F. Grossman, professor of medicine at the University of Toronto. ■

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