Asthma control and medication use in patients with allergic vs. nonallergic forms of asthma

Asthma is a diverse disease with many presentations and numerous etiologies but all are characterized by airway inflammation that, in patients, gives rise to respiratory symptoms of wheeze, shortness of breath, chest tightness, and cough, and variable degrees of limited airflow. In general, patients with asthma can be subdivided into two forms, allergic and nonallergic. Approximately two-thirds of patients with asthma have some evidence of allergy and their condition differs from those with nonallergic asthma in terms of symptoms and clinical outcomes. Because of these differences in clinical expression, the control of asthma and medication use in patients with asthma with and without allergies differ and, in the real-world setting, has not been well documented. To address these issues, Sullivan and coworkers from the Department of Pharmacy Practice, Regis University School of Pharmacy, Denver, Colorado, performed a study to compare asthma control and medication use in patients with persistent asthma with evidence of allergy versus those with persistent asthma with no evidence of allergy.

Who or What Was Proposed to Be Studied?

The authors used both a retrospective analysis and a prospective analysis of survey responses and medication claims data of patients with persistent asthma ages ≥12 years in a U.S. health maintenance organization. The study subjects were divided into 971 patients with persistent asthma with evidence of allergy and 312 patients with persistent asthma with no evidence of allergy.

How Was the Study Done?

Adjusted data showed that patients with evidence of allergy had worse scores than patients with no evidence of allergy. Patients with evidence of allergy also had greater asthma medication use, most notably 2.5 times more prescriptions of high-dose inhaled corticosteroid in a 4-month period.

What Are the Limitations of the Proposed Study?

The report is subject to limitations based on the limited single-center perspective.

What Are the Implications of the Study?

Patients with persistent asthma with evidence of allergy had worse asthma control and greater medication use than patients with persistent asthma with no evidence of allergy. Patients with asthma associated with allergy may need more vigilant clinical oversight and treatment management to ensure adequate asthma control.