Comorbidity factors identified for exacerbation-prone asthma

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(HealthDay)—Factors that are associated with exacerbation-prone

asthma (EPA) have been identified, with blood eosinophils, body mass index, and bronchodilator responsiveness associated with exacerbation frequency, according to a study published online Aug. 24 in the *American Journal of Respiratory and Critical Care Medicine*.

Loren C. Denlinger, M.D., Ph.D., from the University of Wisconsin in Madison, and colleagues examined the clinical, physiological, inflammatory, and comorbidity factors associated with EPA. Patients were classified by the number of exacerbations in the previous year.

The researchers found that 41 percent of the 709 subjects in the National Heart, Lung, and Blood Institute Severe Asthma Research Program (SARP)-3 cohort had no exacerbations and 24 percent were exacerbation prone in the previous year. In SARP-3, factors normally associated with severity (asthma duration, age, sex, race, and socioeconomic status) were not associated with exacerbation frequency; bronchodilator responsiveness differentiated exacerbation proneness from asthma severity. There were positive associations for blood eosinophils, body mass index, and bronchodilator responsiveness with exacerbation frequency in the SARP-3 multivariable model. Even after adjustment for multiple factors, chronic sinusitis and gastroesophageal reflux were also associated with exacerbation frequency. In the SARP 1 + 2 multivariable model, these effects were replicated.

"EPA may be a distinct susceptibility phenotype with implications for the targeting of exacerbation prevention strategies," the authors write.

More information: Full Text (subscription or payment may be required)