

Serum periostin IDs comorbid chronic rhinosinusitis in asthma

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(HealthDay)—For patients with asthma, serum periostin is useful for

detecting chronic rhinosinusitis with nasal polyps, according to a study published online March 1 in the *Annals of the American Thoracic Society*.

Takamitsu Asano, M.D., from the Nagoya City University Graduate School of Medical Sciences in Japan, and colleagues examined the utility of serum periostin as a diagnostic biomarker for upper airway disease in [patients](#) with [asthma](#). Sixty-five patients with stable asthma were enrolled: 20 without upper airway disease, 22 with rhinitis, and 23 with [chronic rhinosinusitis](#) (13 with and 10 without nasal polyps). Serum periostin, eotaxin, total immunoglobulin E, fractional exhaled nitric oxide, and blood-sputum eosinophil levels were measured.

The researchers found that patients with asthma with chronic rhinosinusitis had higher serum periostin levels than those without upper airway disease (109.6 ± 47.4 ng/mL versus 83.2 ± 22.9 ng/mL; $P = 0.04$). Patients with asthma with chronic rhinosinusitis and nasal polyps had higher serum periostin levels than those without nasal polyps (130.0 ± 46.6 ng/mL versus 87.9 ± 37.7 ng/mL; $P = 0.001$). There was no correlation for serum periostin levels with the presence or severity of rhinitis. Receiver operating curve analyses showed moderate and high diagnostic accuracy for detecting chronic rhinosinusitis and chronic rhinosinusitis with nasal polyps, respectively (area under the curve, 0.71 and 0.86, respectively). Serum periostin was the only biomarker that detected the presence of nasal polyps when comparing patients with comorbid chronic rhinosinusitis and nasal polyps to those without.

"Serum periostin is useful for detecting chronic rhinosinusitis with [nasal polyps](#) and predicting radiological chronic rhinosinusitis severity in patients with asthma," the authors write.

The study was funded by research grants from pharmaceutical companies.

More information: [Abstract](#)
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