

Sex hormones, inflammation affect asthma in obese women

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(HealthDay)—Sex hormones and systemic inflammation may be

mediating the obese-asthma phenotype, according to a study published online March 23 in *Allergy*.

Hayley A. Scott, Ph.D., from the University of Newcastle in Australia, and colleagues assessed the associations between [sex hormones](#), [oral contraceptive pill](#) (OCP) use, systemic inflammation and [airway inflammation](#) in 39 obese and 42 nonobese females and 24 obese and 25 nonobese males with asthma.

The researchers found that obese reproductive-age females had higher sputum neutrophils compared with nonobese reproductive-age females ($P = 0.016$), but there was no difference in sputum neutrophils in obese and nonobese males ($P = 0.62$) or older females ($P = 0.087$).

Testosterone and OCP use were negative predictors of sputum neutrophils, while CRP and interleukin-6 were positive predictors of sputum neutrophils. In a multivariate model, BMI and age were not significant predictors. Reproductive-age females using OCP had significantly lower sputum neutrophils than those not using OCP.

"This study suggests that sex hormones and [systemic inflammation](#) may be mediating the obese-asthma phenotype," the authors write.

More information: [Abstract](#)
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