(HealthDay)—Clot retraction rate (CRR) and fibrinolysis rate (FR) are reduced in steroid-naive asthma, according to a study published online Oct. 14 in Allergy.
Maria M. Tomasiak-Lozowska, M.D., Ph.D., from the Medical University of Bialystok in Poland, and colleagues assessed CRR, FR, clot density (CD), plasma levels of plasminogen activator inhibitor (PAI-1) and factor XIII (FXIII), nitric oxide (NO) in exhaled breath \((\text{FE}_{\text{NO}})\), spirometry (forced expiratory volume in one second \([\text{FEV}_1]\)), and eosinophil count (EOS) in allergic, steroid-naive asthma patients (36 patients) and healthy controls (34 patients).

The researchers found that, compared with controls, patients with asthma had significant reductions in CRR, FR, and \(\text{FEV}_1\), and increases in \(\text{FE}_{\text{NO}}\), EOS, PAI-1, FXIII, and CD (all \(P\), and EOS, and a positive correlation with \(\text{FEV}_1\). A positive correlation was seen for FXIII with CD. A negative correlation was seen for CRR with \(\text{FE}_{\text{NO}}\) and a positive correlation with \(\text{FEV}_1\) (all \(P\) "These novel findings suggest that asthma itself is associated with decreased CRR and reduced fibrinolytic potential resulting from alterations in clot architecture and elevated levels of plasma FXIII and PAI-1," the authors write.

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

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