

# Decreased clot retraction rate in asthma

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(HealthDay)—Clot retraction rate (CRR) and fibrinolysis rate (FR) are reduced in steroid-naïve 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](#) (FE<sub>NO</sub>), spirometry (forced expiratory volume in one second [FEV<sub>1</sub>]), 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 FEV<sub>1</sub>, and increases in FE<sub>NO</sub>, EOS, PAI-1, FXIII, and CD (all P<sub>NO</sub>, and EOS, and a positive correlation with FEV<sub>1</sub>. A positive correlation was seen for FXIII with CD. A negative correlation was seen for CRR with FE<sub>NO</sub> and a positive correlation with FEV<sub>1</sub> (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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