Prognostic biomarkers ID'd in pulmonary hypertension

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(HealthDay)—Biomarkers have been identified for the risk of lung transplantation and death in patients with pulmonary arterial hypertension (PAH), according to a study published online Oct. 26 in the *Annals of the American Thoracic Society*.

Nadine Al-Naamani, M.D., from the Tufts Medical Center in Boston, and colleagues examined whether endothelial, inflammatory, and cardiac biomarkers are associated with the World Health Organization (WHO) functional assessment and survival in patients with PAH. The authors measured N-terminal fragment of pro-BNP (NT-pro-BNP), von Willebrand factor (vWF), soluble P-selectin, C-reactive protein, total and high-density lipoprotein (HDL) cholesterol, triglycerides, tumor necrosis factor, interleukin-6, beta-thromboglobulin, and thromboxane B_2 at baseline in 65 patients with PAH. Patients were followed until lung

transplantation, death, or through Aug. 1, 2013.

The researchers found that after adjustment for age, sex, and etiology of PAH, higher vWF activity, lower HDL cholesterol, and higher thromboxane B_2 levels correlated with worse WHO functional class. After adjustment for age, sex, etiology of PAH, and six-minute walk distance, higher NT-pro-BNP levels, lower vWF activity, and lower total cholesterol correlated with an increased risk of death or lung transplant.

"In patients with PAH, lower vWF activity and cholesterol levels and higher NT-pro-BNP levels at baseline were associated with an increased risk of death or transplantation," the authors write.

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