New insights into systemic lupus erythematosus-associated pulmonary arterial hypertension

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A team from Peking Union Medical College Hospital in Beijing, China, have explored changes in the characteristics, treatment, and 5-year survival for SLE-associated PAH in the last decade, and possible reasons for survival change. To date, this is the largest multi-center prospective

SLE-PAH cohort to describe disease characteristics and prognosis. The results have been shared at the 2023 annual congress of EULAR—the European Alliance of Associations for Rheumatology.

A multi-center prospective cohort of 610 patients with SLE-associated PAH was established, and divided into cohort A and B according to the date that people underwent a right heart catheterization procedure. Cohort A was 2011 to 2016, and cohort B was 2016 to 2021. In tandem, a single-center cohort of 104 idiopathic pulmonary arterial hypertension (IPAH) was recruited as a control group in order to describe baseline characteristics and survival. Disease characteristics, treatment regimen, and all-cause mortality were compared between cohorts A and B.

In their abstract, Dong and colleagues report that SLE PAH patients were overall younger, predominantly female, and had lower levels of NTproBNP—an important cardiac biomarker. They also had better functional status, better hemodynamics, and higher 5-year survival than IPAH patients.

Compared with cohort A, those in cohort B showed lower mean pulmonary arterial pressure and pulmonary vascular resistance. They were also more likely to receive intensive immunosuppressants and PAH targeted medication. The 5-year survival rate was higher in cohort B: 88.1% versus 72.9% in cohort A. Analysis showed that treatment goal achievement of PAH and reaching lupus low disease activity state (LLDAS) were both independently associated with lower mortality.

This study shows that survival has improved significantly for SLE-associated PAH. The findings demonstrate that early detection of PAH in SLE patients and achieving treatment goals for both PAH and SLE contribute to improved survival.

More information: Conference: congress.eular.org/

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