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STUDY REVEALS EARLY WARNING SIGNS OF HEART PROBLEMS IN PATIENTS WITH NEWLY DIAGNOSED LUPUS

AUGUST 2, 2018 - Cardiovascular disease is a leading cause of death in patients with lupus, a systemic autoimmune disease. In a new study in *Arthritis & Rheumatology*—a journal published by Wiley on behalf of the American College of Rheumatology—imaging tests revealed signs of cardiac impairment in patients newly diagnosed with lupus, even before any symptoms of chest discomfort.

To determine whether cardiac magnetic resonance (CMR) imaging might uncover early indicators of silent heart problems in patients with lupus, a team led by Meng Jiang, MD, PhD, FSCMR and Jun Pu, MD, PhD, FACC, of Shanghai Jiao Tong University in China, studied 50 patients recently diagnosed with lupus, 60 patients with longstanding lupus, and 50 healthy controls.

Imaging tests revealed structural and functional changes in the hearts of patients with lupus, and the extent of the changes—including signs of scarring, or fibrosis—were related to lupus stage. The findings indicate that early detection and treatment of heart problems may benefit patients with lupus.

Current tests that assess lupus patients' heart health often do not examine changes that are visible with CMR. Therefore, CMR may be useful for detecting the markers of cardiac problems that arise early in the disease process. When these markers are evident, certain therapies may help protect patients' hearts from additional damage.

“Our findings may affect current lupus diagnostics and treatment—meaning more patients with silent cardiac insults could be identified and receive proper treatment,” said Dr. Pu.

Also, once fibrosis appears at later stages, anti-fibrotic treatments may be appropriate, noted Dr. Jiang. “Whether these treatments will improve a patient's prognosis still needs to be evaluated by further clinical studies,” she said.

Full citation: “Early Detection of Silent Myocardial Impairment in Patients with New Onset Drug-Naïve Systemic Lupus Erythematosus – A Three-Center Prospective Study (Myocardial Impairment in New Onset SLE).” Qiang Guo, Lian-Ming Wu, Zi Wang, Jia-Yan Shen, Xuan Su, Chang-Qian Wang, Xing-Rong Gong, Qing-Ran Yan, Qing He, Wei Zhang, Jian-Rong Xu, Meng Jiang, and Jun Pu. *Arthritis & Rheumatology*; Published Online: August 2, 2018 (DOI: 10.1002/art.40671).

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