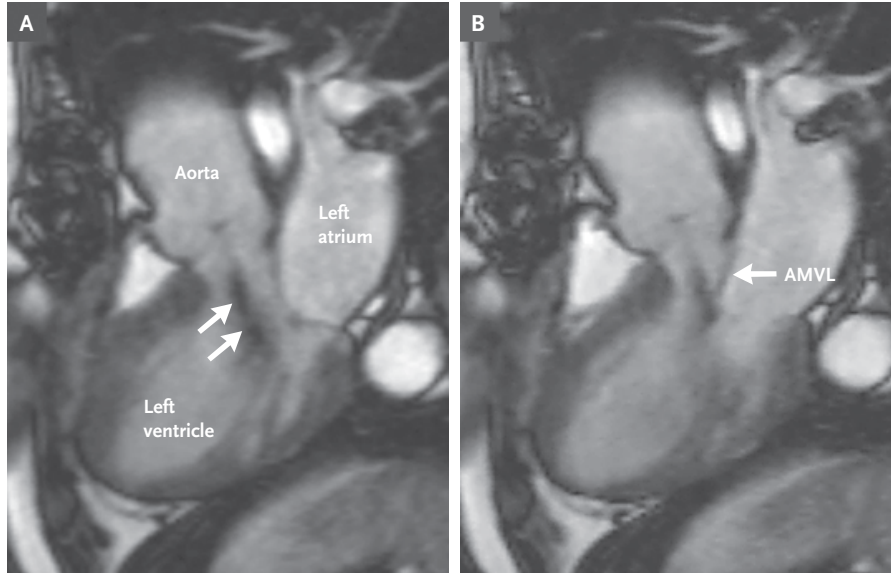


IMAGES IN CLINICAL MEDICINE

Austin Flint Murmur



A 67-YEAR-OLD WOMAN PRESENTED WITH A 3-MONTH HISTORY OF PROGRESSIVE exertional dyspnea. Her blood pressure was 132/50, and her pulse was 74 beats per minute. Examination revealed a large-volume collapsing pulse, a short-ejection systolic murmur terminating well before the second heart sound, an early diastolic decrescendo murmur, and a mid-diastolic murmur audible over the cardiac apex (an Austin Flint murmur). She had had rheumatic fever in childhood. A magnetic resonance image of the heart reveals a central, high-velocity jet, due to aortic-valve incompetence (Panel A, arrows), projecting into the left ventricular cavity. The jet clearly strikes the anterior mitral-valve leaflet (AMVL), causing distortion and premature closure during diastole (Panel B; also see the video, available with the full text of this article at www.nejm.org). The patient had a response to treatment with diuretics and vasodilators, and at 9 months of follow-up, she was doing well. The cause of the Austin Flint murmur is controversial, with some suggesting that the mitral valve has no role. This case supports the hypothesis that fluttering, distortion, and early closure of the AMVL caused by the aortic regurgitant jet may play a role in the Austin Flint murmur.

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