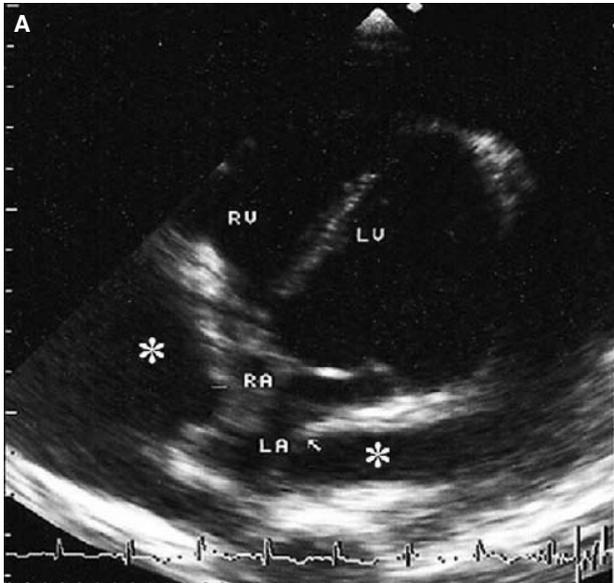


Double “Mercedes-Benz” sign secondary to tuberculous pericarditis

Tüberküloz perikarditine bağlı çift “Mercedes-Benz” bulgusu

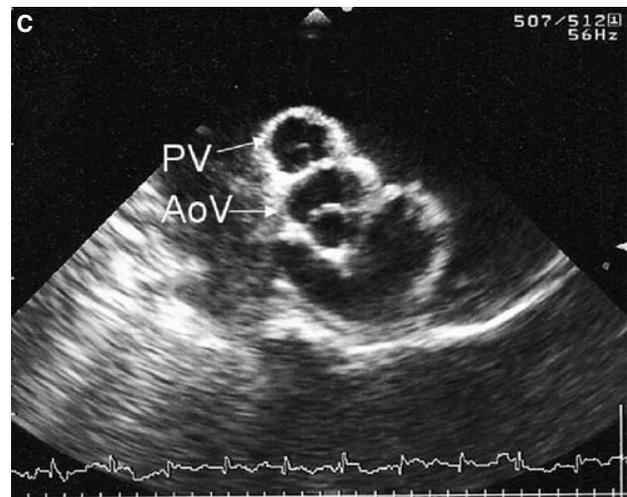
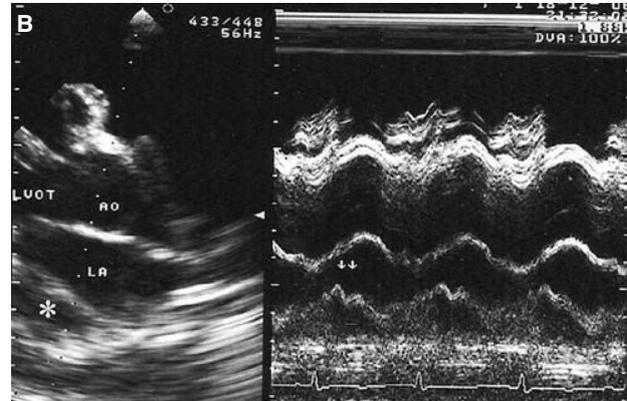


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A 23-year-old female patient was admitted with progressive dyspnea of two-month history. On physical examination, her blood pressure, heart rate, and axillary temperature were 95/60 mmHg, 96 beats/min, and 37.4 °C, respectively. Cardiac

auscultation showed reduced heart sounds without any murmur. A 12-lead electrocardiogram revealed reduced QRS amplitude (<10 mm) in both extremity and precordial leads. Transthoracic echocardiography revealed a large pericardial effusion rich in fibrin fibers. Late systolic compression of both atria was noted in the two-dimensional apical four-chamber view (Fig. A) and M-mode recording of the parasternal long-axis view revealed left atrial compression at early diastole, a rare finding of pericardial effusion (Fig. B). A two-dimensional modified parasternal short-axis view revealed double “Mercedes-Benz” sign, one was on the left and anteriorly located, and the other was on the right and posteriorly located,



formed by the pulmonary valve and aortic valve, respectively (Fig. C). After several unsuccessful attempts to perform diagnostic and therapeutic pericardiosynthesis, she underwent surgery for opening a pericardial window. All the echocardiographic findings listed above disappeared after surgery. Serological and cultural analysis of the pericardial fluid revealed *Mycobacterium tuberculosis*. She was prescribed antituberculous treatment and she was well on the sixth-month phone call. Rotation of cardiac chambers and main vascular structures due to massive pericardial effusion might be the basis of the peculiar double “Mercedes-Benz” sign, resulting in parallel aortic and pulmonary valves, and mimicking transposition of the great arteries.

Figures. (A) Two-dimensional apical four-chamber view showing late systolic compression of both atria (asterisk: pericardial effusion; arrow: inversion of the left atrial wall). (B) M-mode recording of the parasternal long-axis view showing left atrial compression at early diastole (asterisk: pericardial effusion; arrows: notching and compression of the left atrial wall). (C) Two-dimensional modified parasternal short-axis view showing double “Mercedes-Benz” sign and parallel location of the two valves. LA: Left atrium; LV: Left ventricle; RA: Right atrium; RV: Right ventricle; Ao: Aorta; LVOT: Left ventricular outflow tract; PV: Pulmonary valve; AoV: Aortic valve.