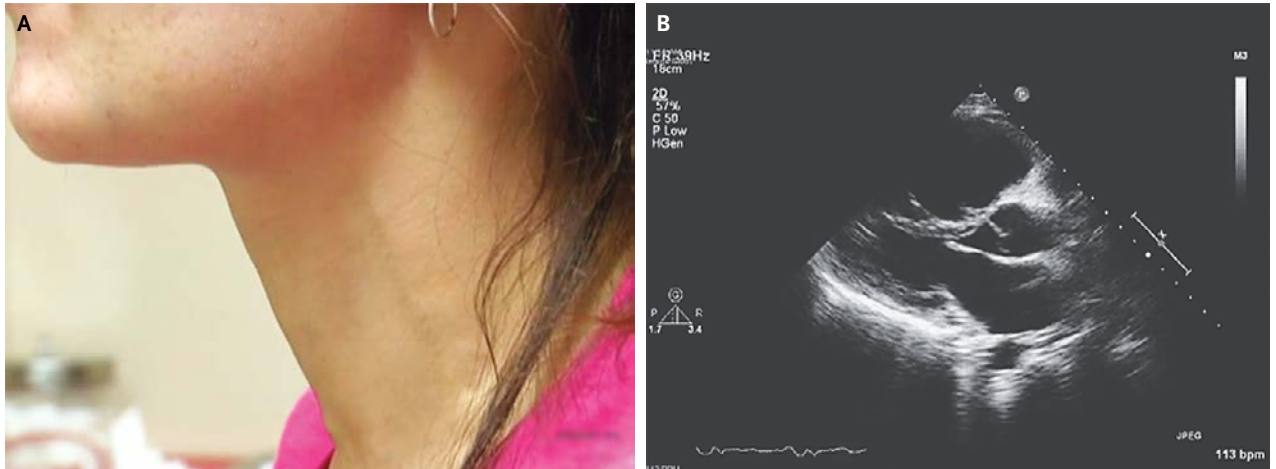


IMAGES IN CLINICAL MEDICINE

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Giant C-V Waves of Tricuspid Regurgitation



A 33-YEAR-OLD WOMAN WHO HAD RECEIVED A DIAGNOSIS OF TRICUSPID-valve endocarditis caused by methicillin-resistant *Staphylococcus aureus* was evaluated for replacement of the tricuspid valve. She had New York Heart Association functional class II symptoms of heart failure. Giant systolic pulsations, known as C-V waves, were observed on jugular venous examination (Panel A and Video 1). Transthoracic echocardiography revealed normal left ventricular size and systolic function. The left ventricular ejection fraction was more than 55%. The right ventricle was moderately to severely dilated. The right ventricular systolic function was mildly to moderately reduced. The left atrial size was normal, but the right atrium was severely dilated. A moderate-sized vegetation on the tricuspid valve was seen, and the right ventricular systolic pressure was elevated, at 30 to 40 mm Hg. There was severe tricuspid regurgitation (Panel B and Video 2). During surgery, the posterior leaflet of the tricuspid valve was found to be severely compromised, the anterior leaflet was unremarkable, and the septal leaflet had a perforation. The tricuspid valve was replaced with a bioprosthetic valve, and the patient recovered without complications. As the degree of tricuspid regurgitation increases, there is regurgitation of blood into the right atrium during systole. With severe tricuspid regurgitation, the V wave of tricuspid regurgitation merges with the C wave, forming a single C-V wave. This C-V wave of severe tricuspid regurgitation resembles the large carotid-pulse wave of severe aortic regurgitation and is often confused with this pulsation.

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