Earlobe pulsation: a sign of tricuspid regurgitation

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DESCRIPTION

A 72-year-old woman had been experiencing shortness of breath for 2 weeks. Her jugular venous pressure was elevated, with prominent systolic pulsations and waggling earlobes (figure 1 and video 1). The prominent pulsations were eliminated with gentle pressure at the base of the neck. Auscultation revealed a loud pulmonary component of the second heart sound and a holosystolic murmur at the left lower sternal border that increased with inspiration. Transthoracic echocardiography confirmed severe tricuspid regurgitation and a dilated inferior vena cava without respiratory fluctuation. The estimated pulmonary artery systolic pressure was >50 mm Hg. Right-sided congestive heart failure was diagnosed and treated with oral diuretics. Within 1 week, the symptoms improved (figure 2 and video 2).

Jugular venous pulsations ascend with congestive heart failure and may reach the earlobes, causing them to pulsate. In severe tricuspid regurgitation, one may see movements of the earlobes coincident with systole, as the C-V wave causes them to ‘waggle’ with each pulsation. This C-V wave of severe tricuspid regurgitation resembles the large
carotid-pulse wave of severe aortic regurgitation and is often confused with it.2

Learning points

► Earlobe pulsation is indicative severe tricuspid regurgitation.
► The C-V wave of severe tricuspid regurgitation resembles the large carotid-pulse wave of severe aortic regurgitation.

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