INTRODUCTION

Despite the advent of the diagnostic evaluation of cardiac valvular lesions and functional status, bedside examination of neck veins remains an essential tool to provide valuable information about patient’s cardiac status from the estimation and analysis of the jugular venous pressure (JVP). This case describes a patient with severe tricuspid regurgitation in decompensated cardiac failure who presented with the classical “Giant C-V wave” in her neck veins.

CASE PRESENTATION

An 84-year-old lady presented with two weeks history of progressively worsening dyspnea (New York Heart Association class III) and bilateral leg swelling. She had past medical history of long-standing hypertension, ischemic heart disease with atrial fibrillation, and on long-term warfarin anticoagulation...
for chronic pulmonary embolism. On examination, her pulse was 110 beats per minute, irregularly irregular and blood pressure was 100/65 mmHg. The JVP was grossly elevated up to the earlobes, causing irregular pulsation even with her in an upright position (Figure A, B, and Video). A grade 4/6 pansystolic murmur was best heard at the left lower sternal border of precordium which was accentuated with inspiration. She also has bilateral lung crepitations, prominently pulsatile hepatomegaly with ascites and peripheral edema. Significant investigations included an ECG which showed atrial fibrillation with controlled ventricular response and right ventricular (RV) hypertrophy. Chest X-ray anteroposterior revealed cardiomegaly with dilated right atrium and pulmonary artery. Transthoracic echocardiogram showed severely dilated RV cavity, incomplete tricuspid valve coaptation with severe tricuspid regurgitation (with evidence of systolic flow reversal in the hepatic vein), likely as a result of pulmonary hypertension and was complicated by severe right heart failure.

DISCUSSION

This patient has severe tricuspid regurgitation with right heart failure, which has resulted in what is known as ‘Lancisi sign’, a pathological fusion of “c” and “v” wave and loss of “x” descent, forming ‘Giant
C-V wave’ signifying large systolic venous return to right atrium due to tricuspid regurgitation. It is also to note that this patient has absent “a” wave due to underlying atrial fibrillation. Although giant C-V wave may resemble prominent carotid arterial pulse, this can be overcome by noting the key distinguishing features including venous pulsation being nonpalpable, obliterateable with pressure and varies with position and respiration.

CONCLUSION

Careful JVP inspection, measurement, and interpretation remain an essential and valuable bedside clinical sign which provides a useful physiologic estimation of the hemodynamic status in the right atrium.

REFERENCES

1. Cook DJ, Simel DL. *The Rational Clinical Examination. Does this patient have abnormal central ven pressure?* JAMA. 1996; 275:630-34
