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**Clinical vignette**

doi:10.1093/eurheartj/ehi848

Online publish-ahead-of-print 28 March 2006

**Carcinoid heart disease as shown by 64-slice CT coronary angiography**

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An 82-year-old woman presented with disseminated ovarian carcinoid tumour. She subsequently developed signs of heart failure thought to be secondary to carcinoid heart disease. CT images were taken in our 64-slice scanner with ECG-gating. The CT images revealed markedly thickened pulmonary valve leaflets, without calcification, seen in short and long axis in Panels A (arrows) and B. The pulmonary valve failed to fully close in diastole (Panel A). The tricuspid valve was also significantly thickened, again without calcification, in contrast to the normal appearance of the mitral valve (Panel C). The right atrium (RA) was markedly dilated, with the presence of a flap valve communication (Panel C, arrow) between the right and left atria. Severe tricuspid regurgitation was demonstrated, with failure of apposition of the valve leaflets, a dilated IVC, and reflux of contrast down the hepatic veins. The right ventricle (RV) was also dilated (Panel D). Mitral and aortic valves appeared normal. We found MSCT to be a useful tool in evaluating carcinoid heart disease.

Panel A. Short-axis view of the pulmonary valve in diastole showing the three thickened valve leaflets (arrows) with failure of apposition. Ao, aorta.

Panel B. Long-axis view of the pulmonary valve showing a thickened valve without calcification. PA, pulmonary artery.

Panel C. Four-chamber view showing thickened tricuspid valve leaflets with failure of apposition, a dilated RA, and a flap valve (arrow) communicating between RA and left atrium (LA).

Panel D. Long-axis view showing a dilated RV and thickened pulmonary valve leaflets.