Multiple aorto-right cavitary fistula: a rare complication of prosthetic valvular endocarditis in intravenous drug users

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Aorto-cavitary fistula is an uncommon complication as well as multiple fistula. In patients with the diagnosis of infective endocarditis (IE), only 0.4% of i.v. drug users present this complication, and less than 1 of 500 IE shows a multiple fistula, being the most rare among intracardiac fistulas.1

The prognosis of IE worsens if there are fistulas associated, exceeding the mortality over 40% despite aggressive surgical treatment.1,3 Heart failure, prosthetic IE, and urgent surgical treatment are identified as variables with increased risk of death.1

Transoesophageal echocardiography offers a better sensitivity and specificity than TTE, detecting nearly 100% of the patients with this complication in comparison with less of 60% of those by TTE.1 But sometimes TTE, as in our case, is enough to obtain these infrequent pictures that we present.4

References
Figure 1 (A, B and C) Parasternal approach. (A) Long-axis plane: a big vegetation attached to the prosthetic valve (arrows) and an abscess in the right coronary sinus (asterisk). (B and C) Short-axis plane: abscesses in right coronary and non-coronary sinus (asterisks), and the flow of both shunts towards right cavities (arrows). (D) Apical approach/five-chamber plane: two fistular orifices between aortic root and right cavities (arrows). LA, left atrium; RA, right atrium; LV, left ventricle; RV, right ventricle; Ao, aorta; RVOT, right ventricular outflow tract.