## Giant cardiac lesion in anaplastic thyroid cancer

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Giulia Guerra, MD,<sup>a</sup> Assunta Fabozzo, MD, PhD,<sup>a</sup> Rosario Marchese Ragona, MD, PhD,<sup>b</sup> and Gino Gerosa, MD,<sup>a</sup> Padova, Italy

From the <sup>a</sup>Cardiac Surgery Unit, Department of Cardio-Thoracic, Vascular Science and Public Health; and <sup>b</sup>Otolaryngology Unit, Department of Neuroscience, University of Padova, Padova, Italy.

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Address for reprints: Assunta Fabozzo, MD, PhD, Cardiac Surgery Unit, Department of Cardio-Thoracic, Vascular Science and Public Health, University of Padova, Padova, Italy (E-mail: assunta.fabozzo@gmail. com).

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Intraoperative view of the cardiac metastasis of anaplastic thyroid carcinoma.

## **CENTRAL MESSAGE**

Cardiac metastases of ATC are rare. Benefits of cardiac surgery on early postoperative survival are very limited.

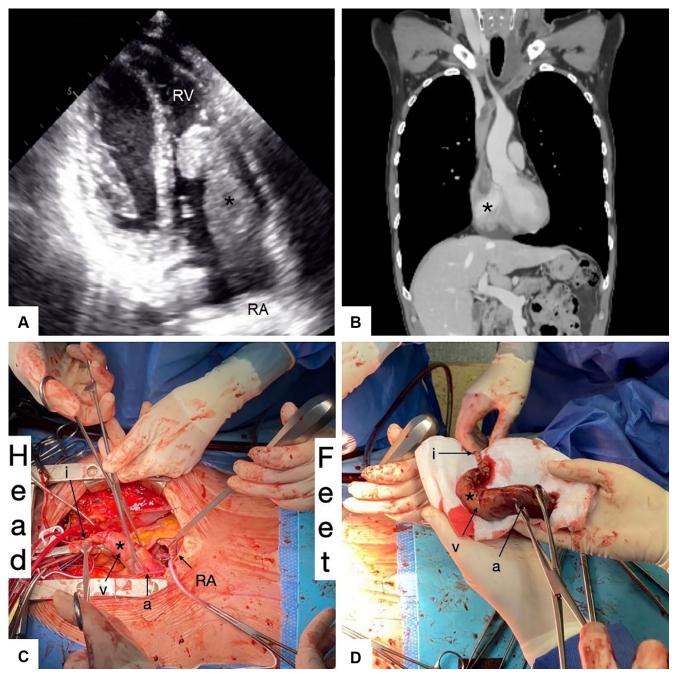
▶ Video clip is available online.

Cardiac metastases of anaplastic thyroid carcinoma (ATC)

are extremely rare and mostly documented at the time of autopsy.<sup>1</sup> Intracavitary lesions should be removed to avoid sudden death and/or pulmonary embolism,<sup>2</sup> but the poor outcomes associated with ATC yield surgical indications controversial. With his informed consent, we describe the case of a 53-year-old man who underwent thyroidectomy (through left-lateral cervicotomy) and, 2 months later, cardiac surgery to remove an intracardiac metastasis, occupying almost entirely the right heart (Video 1). Thrombosis of the left jugular, subclavian and innominate veins was also demonstrated (Figure 1, A and B). At surgery, left femoral vein and ascending aorta were cannulated to establish extracorporeal circulation. Under cardioplegic arrest, right atriotomy allowed total exeresis of the mass, which appeared completely capsulated (Figure 1, C and D). Histology revealed undifferentiated neoplastic cells within thrombotic organized tissue. Although an early postoperative echocardiogram confirmed cardiac chambers' clearness, the patient underwent resternotomy after 5 days for pericardial (nonthrombotic) effusion and, 15 days later, computed tomography showed the reorganization of the intravascular thrombosis. Despite surgery, his prognosis was deemed ominous, and no other procedures were performed. Noncardiac-related death occurred 2 months later, underlying the very limited value of this intervention, although suggested in other reports,<sup>3</sup> on early survival.<sup>4</sup>



**VIDEO 1.** Preoperative echocardiographic evaluation of the mass occupying almost entirely the right heart. Video available at: https://www. jtcvs.org/article/S2666-2507(22)00513-2/fulltext.



**FIGURE 1.** Intracardiac metastasis of anaplastic thyroid carcinoma. A, Echocardiographic image of the mass (length 14 cm, width 4 cm, depth 3 cm); B, Computed tomography of the chest showing the mass. C and D, Intraoperative view of the specimen: *asterisk* indicates the mass, the focal point of the image. a, atrial part; v, ventricular part; i, infundibular part. *RV*, Right ventricle; *RA*, right atrium.

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