Intracardiac extension of uterine leiomyomatosis

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DESCRIPTION

A 55-year-old previously healthy woman noticed progressive breathlessness over 6 months. Contrast CT and transthoracic echocardiogram (TTE) showed pulmonary nodules, tricuspid regurgitation and a non-occlusive mass in the right ventricular outflow tract. Pelvic CT contrast scan showed endometrial abnormalities without intravascular invasion. Endometrial fine-needle aspirations and percutaneous lung biopsies yielded no definitive diagnosis. The patient underwent cardiac MRI 2 days prior to cardiac surgery, showing high-contrast uptake on delayed enhancement in the tumour (figure 1A), suggestive for cardiac myxoma or sarcoma with alarming progression of disease within 3 weeks from the initial TTE, resulting in near-occlusion of right ventricular outflow tract and right pulmonary artery. After urgent multidisciplinary team (MDT) discussion, urgent resection of the intracardiac mass took place to prevent acute occlusion of right ventricular outflow tract and to establish a tissue diagnosis, as the MRI excluded the link between the pelvic and cardiac masses. The mass was multilobular, smooth and attached to the trabeculations of the right ventricle. It was removed while also necessitating a bioprosthetic tricuspid valve replacement (figure 1B). Three weeks later, the patient underwent a staged hysterectomy and bilateral salpingo-oophorectomy. This was based on the histopathology from the cardiac mass, which revealed leiomyomatosis. The uterine mass also revealed intravascular leiomyomatosis. A lung MDT excluded the need for intervention for these nodules, due to multifocality. The patient remained well 14 months following the initial cardiac surgery; pulmonary nodules did not show any signs of progression regarding size, invasion and number in follow-up MRI.

Learning points

▸ Intracardiac extension of uterine leiomyomatosis should be considered in any female presenting with a mass in the right ventricle, even with atypical MRI features of the mass (this mass showed high-contrast uptake on the second uptake).

▸ Tissue diagnosis is the definitive way to diagnose intracardiac extension of uterine leiomyomatosis.

Competing interests None declared.

Patient consent Obtained.

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Figure 1 (A) Cardiac MRI showing the extension of the mass from the right ventricle to both branches of pulmonary artery. (B) An intraoperative image showing the mass (*) bulging through and encapsulating the tricuspid valve into the right atrium.