Resection of Left Ventricular Rhabdomyosarcoma

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A 24-year-old woman, a Jehovah’s Witness, presented to the Emergency Department with a 4-day history of palpitations and found to be in fascicular ventricular tachycardia (A). This proved difficult to control and alternated with sinus rhythm (normal QRS morphology). Echocardiogram and cardiac magnetic resonance imaging showed a well demarcated 11 × 14 mm mass in the anteroseptal left ventricular (LV) wall (B, Online Video 1, C, Online Video 2).

The patient underwent right anterolateral minithoracotomy. Cardiopulmonary bypass was instituted via femoral cannulae. The left atrium was entered in Sondergaard’s groove, allowing good exposure of the LV through the mitral valve. The mass, attached by multiple trabeculae, was resected by diathermy (D, Online Video 3).

Histopathology was consistent with rhabdomyosarcoma (E). Staging computed tomography and positron emission tomography suggested no metastases. Adjuvant chemotherapy was recommended. Minimal access surgery allowed complete and safe resection of this rare tumor with minimal blood loss in a patient who refused blood transfusion.

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