A 19-YR-OLD man with previously resected testicular cancer presented with suspected metastatic teratoma within the inferior vena cava (IVC). Magnetic resonance showed the tumor arising from the IVC wall, inferior to the hepatic vein’s confluence and above the renal veins. Initial intraoperative transesophageal echocardiography assessment was performed to ensure no interim tumor expansion above hepatic veins and absence of intracardiac shunts, predisposing to paradoxical embolization. During IVC cross-clamp and total liver vascular exclusion, echocardiography imaging helped in the placement of the vascular clamp above the tumor and was essential for assessment of the ventricular preload, fluid management, and titration of vasopressors.


Surgery was completed successfully. Postoperative pathology revealed inflammatory myofibroblastic tumor. This report illustrates the utility of intraoperative echocardiography in guiding surgical resection of endoluminal tumors occluding the IVC and hemodynamic management during complete IVC cross-clamping.

References