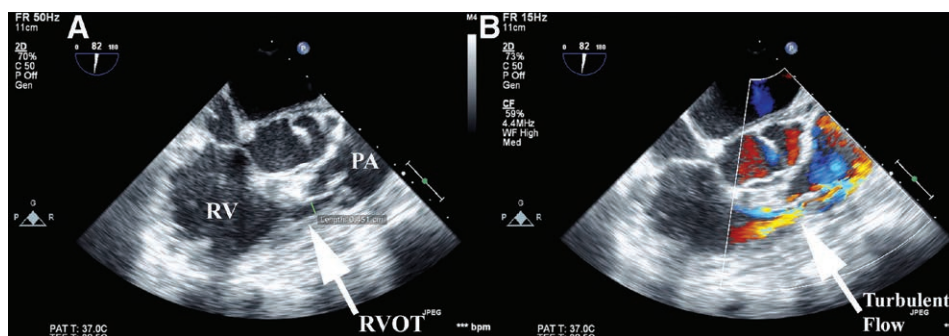


Double-chambered Right Ventricle

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Double-chambered right ventricle is diagnosed with transthoracic or transthoracic echocardiography by the presence of a high-pressure proximal region under the tricuspid valve and a low-pressure distal region near the pulmonary valve with high-velocity, turbulent flow created by anomalous muscle bands in the right ventricular outflow tract (image panels *A* and *B*; PA, pulmonary artery; RV, right ventricle; RVOT, right ventricular outflow tract). The midesophageal right ventricular inflow–outflow view shows classic right ventricular outflow tract obstruction from anomalous muscle narrowing the outflow to a diameter of 0.45 cm (normal ~2.2 cm; panel *A*). If pressure gradients are difficult to obtain, the diagnosis of double-chambered right ventricle can be made by the presence of abnormal acceleration of flow within the right ventricle using color flow Doppler.¹ Color flow Doppler placed across the significantly narrowed right ventricular outflow tract in this patient demonstrated a mosaic pattern from high-velocity, turbulent flow (panel *B*; Supplemental Digital Content, <http://links.lww.com/ALN/B785>) diagnostic of double-chambered right ventricle. Color flow Doppler may also be used to determine the exact location of flow obstruction and high- and low-pressure chambers if unclear with two-dimensional imaging.

Double-chambered right ventricle is a rare congenital or acquired cardiac abnormality and may be associated with other malformations including membranous ventricular septal defect or double outlet right ventricle.¹ Patients may present with symptoms

resembling ischemia or heart failure, including dyspnea and acute drops in blood pressure with syncope or lightheadedness.² If a dynamic component to the obstruction exists, preoperative treatment with β blockers or calcium channel blockers may be beneficial, and intraoperative administration of inotropes should be avoided. Because increasing right ventricular contractility could be detrimental, hemodynamic goals include maintaining right ventricular preload, left ventricular afterload, and a sinus rhythm. Ventricular arrhythmias or right bundle branch block may occur, especially after surgical intervention.³

Competing Interests

The authors declare no competing interests.

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Anesthetic Powers?: Whiskey for Neonatal Surgery in 1934 Kansas City



On Friday, May 11, 1934, in Kansas City, Missouri, Mrs. Clara Powers (*right*) reluctantly permitted emergency surgery on her dehydrated baby boy. Sixteen-day-old Harold William Powers (*left*) had a palpable mass obstructing the passage of fluids through his stomach. After placing a small bag of sugar in the baby's mouth, an intern "dropped whisky on the sugar [bag] until the child fell into a stupor." The surgeon's local anesthetic supplemented the intern's whiskey one, and a successful pyloromyotomy was performed. The Monday after the surgery, news headlines nationwide read mistakenly, "Whisky and Sugar Given Baby as Anesthetic for Operation." (Copyright © the American Society of Anesthesiologists' Wood Library-Museum of Anesthesiology.)

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