

Double Chamber Right Ventricle in Pregnancy

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Background:

- Double Chambered Right Ventricle (DCRV) is a rare anomaly that occurs in about 1% of patients with congenital heart disease

Diagnosis:

- Usually diagnosed in childhood concurrently with a VSD diagnosis
 - Rarely presents in adulthood
- Right ventricle is divided by a muscular band into a proximal high-pressure chamber and distal low-pressure chamber
- Cardiac MRI is an important diagnostic tool, as diagnosis with TTE is notoriously difficult¹

Case: 20yo G1P0 with a DCRV diagnosed at 12w0d

1. Murthy (2012) Not all obstructive cardiac lesions are created equal: double-chamber right ventricle in pregnancy

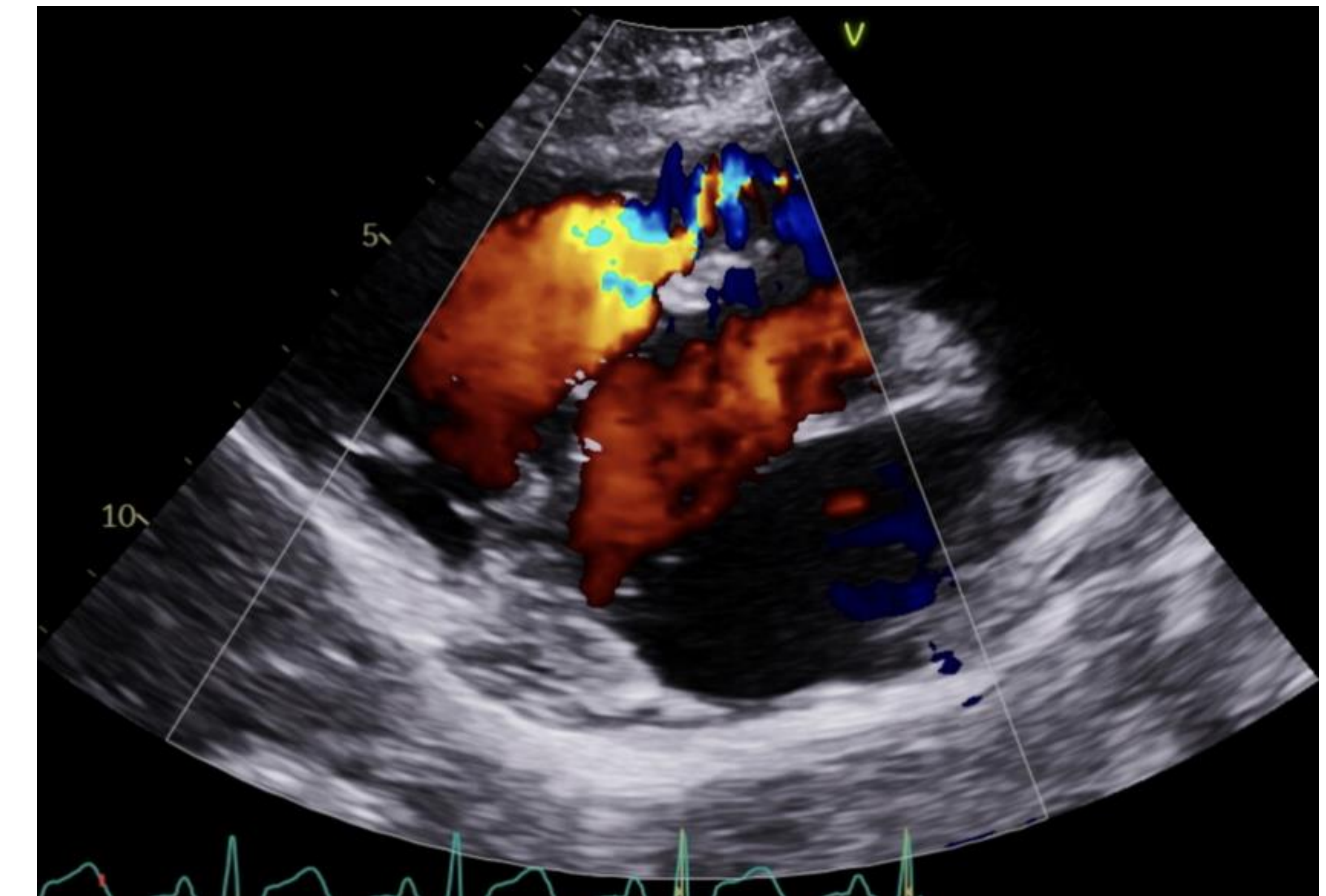
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Case progression:

- Patient initially presented to the ED with a chief complaint of near syncope, chest pain, and tachycardia
 - PMHx notable for supracristal VSD status post patch repair and right ventricular outflow tract (RVOT) myotomy.
- Work Up:
 - EKG: Sinus Rhythm with known RBBB
 - TTE: Potential RVOT Obstruction, normal ventricular function
 - Cardiac MRI: DCRV
- Delivery:
 - She presented in labor at 38w1d → elected for neuraxial anesthesia
 - A DPE was performed
 - She had a vacuum assisted vaginal delivery.
 - Standard monitoring + continuous telemetry throughout labor and 24 hours postpartum



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ANNUAL MEETING

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Learning Points:

- Prognosis is related to both the degree of cavitory obstruction in the RV and the intercavitory pressure gradient
- There is risk for RVOT obstructive physiology, arrhythmias, and RV systolic dysfunction
- Beta blockade can assist in symptom management, and surgical correction outside of pregnancy is curative
- These patients require interdisciplinary management with adult congenital cardiologists, maternal fetal medicine, and anesthesiologists experienced in the care of pregnant patients with complex cardiac lesions