

Illustration

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Volume 2 : Issue 4

Article Ref. #: 1000HROJ2120

Article History

Received: October 19th, 2015

Accepted: October 27th, 2015

Published: October 28th, 2015

Citation

Sattiraju S, Farasat M, Rabidya V, Mehta S. An educational and illustrative case report of late complications following repair of tetralogy of fallot [videos]. *Heart Res Open J.* 2015; 2(4): 115-117. doi: [10.17140/HROJ-2-120](https://doi.org/10.17140/HROJ-2-120)

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An Educational and Illustrative Case Report of Late Complications Following Repair of Tetralogy of Fallot

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ABBREVIATIONS: TOF: Tetralogy of Fallot; RVOT: Right Ventricular Outflow Tract; LV: Left Ventricle; RV: Right Ventricle; IAS: Interatrial septum; IVS: Interventricular septum; PV: Pulmonary Valve; PR: Pulmonary Regurgitation; PA: Pulmonary Artery; PI: Pulmonary Inflow (on Doppler); LA: Left Atrium; RA: Right Atrium.

Severe Pulmonary Regurgitation (PR) and its impact on the Right Ventricle (RV) are recognized late complications of repaired cases of Tetralogy of Fallot (TOF). Relief of Right Ventricular Outflow Tract (RVOT) obstruction by transannular patching or infundibulectomy resulted in obligate pulmonary regurgitation in early surgical era. We present classic echocardiographic findings of severe pulmonary regurgitation and right ventricular enlargement in *an adult patient* aged 50 years who underwent a surgical correction of TOF *when he was 10 years old*. The chronic severe pulmonary regurgitation made its impact with severe enlargement of right ventricle with associated systolic dysfunction.

The Electrocardiography (EKG) shows a right bundle branch block with a very wide QRS duration of 198 ms underscoring the right ventricular cardiomyopathy.

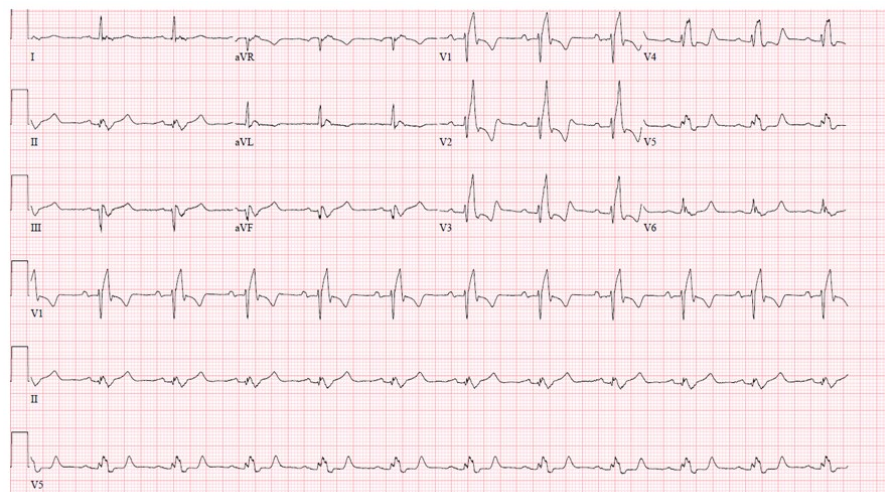
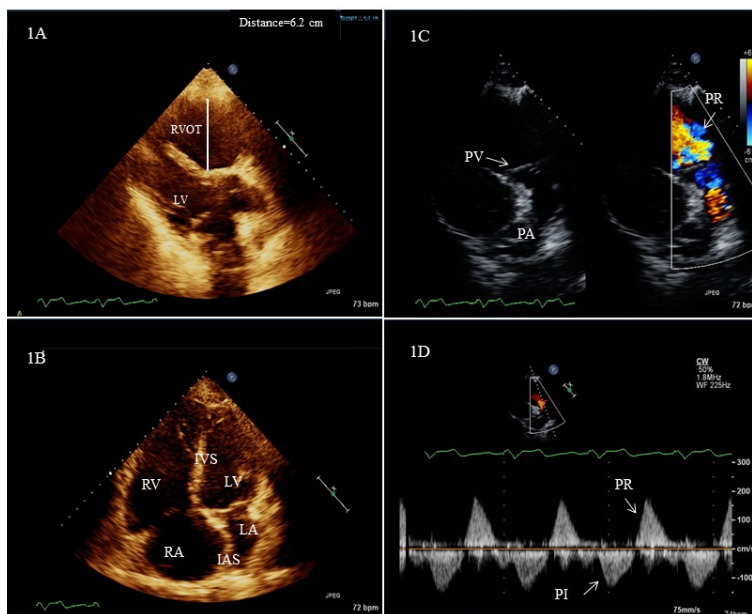


Image 1A, Video 1: Severe enlargement of right ventricular outflow tract (measuring 6.2 cm) is noted.

Image 1B, Video 2: is remarkable for massive enlargement and hypokinesis of right ventricle with septal flattening secondary to volume overload due to severe pulmonary regurgitation. Also noted is severely enlarged Right Atrium (RA). The Interatrial septum (IAS) bows to left due to higher right atrial pressure.

Image 1C, Video 3: Shown is the color comparison view of Pulmonary Valve (PV) (image is in diastole). Torrential pulmonary regurgitation is noted.

Image 1D: A continuous Doppler interrogation across the pulmonary valve shows the classic sine wave pattern of inflow and regurgitation across pulmonary valve with steep deceleration of pulmonary regurgitant waveform, characteristic of severe pulmonary regurgitation.

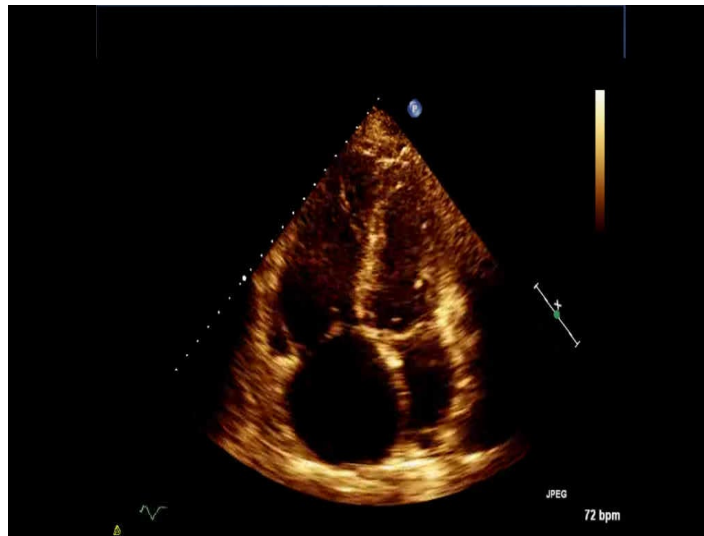


Note: To best view

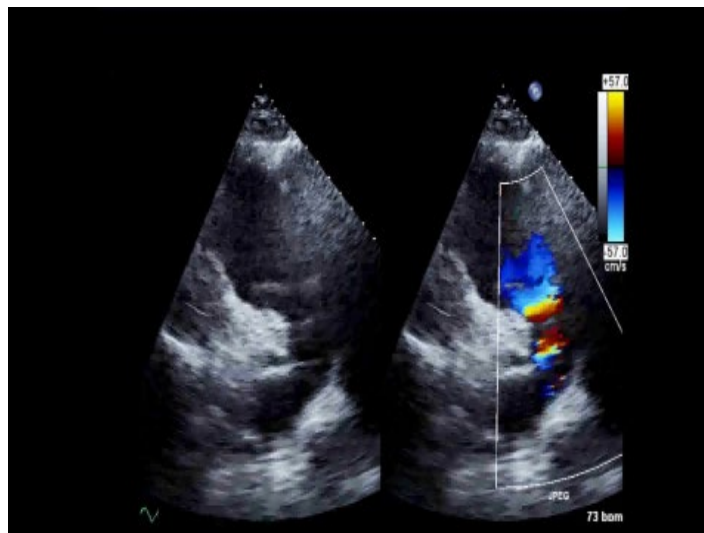
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Video 1



Video 2



Video 3

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

CONSENT

The patient has provided written permission for publication of the case detail.

ACKNOWLEDGEMENT

The authors thank Amanda McCord for her expertise in obtaining echocardiographic images that made this manuscript possible.