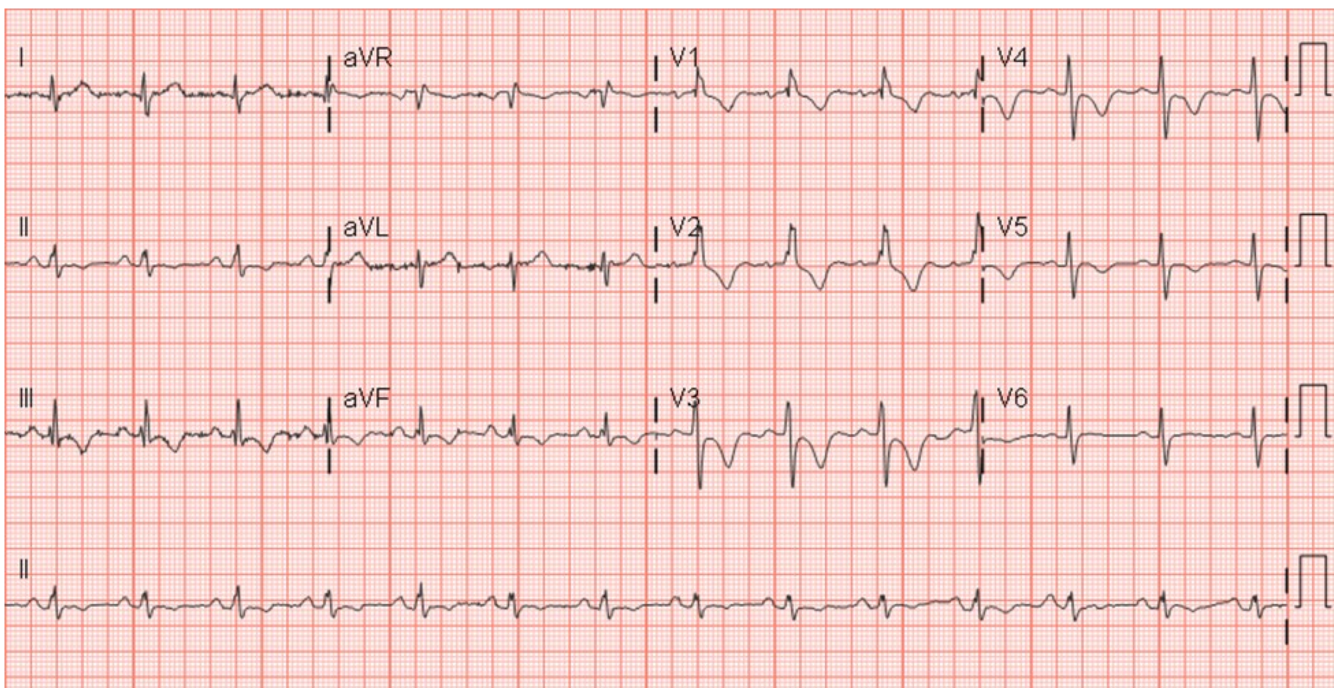
Transfusion Related Acute Lung Injury (TRALI) and Transfusion Related Circulatory Overload (TACO) in the Critically Ill. Transfusion. 2009 January; 49(1): 13-20.

3. Petrides M, Stack G, Cooling L, Maes LY. (2007). *Practical Guide to Transfusion Medicine, 2nd Edition*. Bethesda, Maryland: AABB Press.

Send your questions to coberlye@health.missouri.edu to be published in future editions of the Missouri Hospitalist.

An Electrocardiogram that Tells You All You Need to Know



This is a 66 year old woman with progressive dyspnea on exertion for 7 months. Based on the ECG findings, what further evaluation is indicated?

Answer: Page 12

Answers:

ECG:

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The ECG shows right ventricular hypertrophy with associated ST-T abnormalities. The axis is rightward, and there are both prominent initial forces in V1 and V2 as well as deep narrow S in V5 and V6 greater than 3 mm. The ECG could be mistaken for right bundle branch block; however, the terminal S in lead I and V6 is not wide and the QRS duration is not greater than 120 msec. In a patient with RVH, initial evaluation should include arterial saturation, chest x-ray, and echocardiogram. Physical examination upon presentation in this patient demonstrated an S4 with respiratory variation and a prominent P2 component of the second heart sound, suggesting RV dysfunction and pulmonary hypertension, respectively. A top priority in any patient with pulmonary hypertension, absent evidence of intra-cardiac shunt, is to exclude pulmonary thromboembolic disease. This patient had severe pulmonary hypertension by echocardiogram with an estimated RV pressure of 90 mm Hg. Ventilation-perfusion scan demonstrated multiple segmental mismatches consistent with bilateral pulmonary emboli.

Spot Diagnosis:

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Secondary syphilis. The image demonstrates the well-circumscribed, scale-covered, erythematous plaques characteristic of secondary syphilis. Rapid plasma regain (RPR) was 1:256. He received a single dose of 2.4 million units of benzathine penicillin G intramuscularly, with resolution of his rash. The patient reported high risk sexual contact and was noted to seroconvert, with a positive HIV test 3 months later. He returned for repeat testing within the year, and had a negative RPR.