



Transient severe mitral regurgitation after paroxysmal supraventricular tachycardia in patient with WPW syndrome

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A 65-year-old woman was presented with acute abdominal pain. The initial heart rate was 170 beats/min and the ECG showed supraventricular tachycardia (Figure 1A). After intra-venous adenosine administered, it recovered to sinus rhythm and the follow-up ECG showed WPW pattern (Figure 1B). The echocardiography revealed mitral valve prolapse of mid portion of anteromedial valve leaflet (A2) with severe mitral regurgitation (MR) (Figure 2). The patient was diagnosed with acute cholecystitis and had laparoscopic cholecystectomy. She was discharged with medications including torsemide, spironolactone,

verapamil, angiotensin converting enzyme inhibitor. After a month, follow-up echocardiography showed mild MR (Figure 3). The patient is on regular follow-up with medications.

Eclipsed MR is an unusual form of transient functional MR in the absence of epicardial coronary artery stenosis or left ventricular dysfunction which was first reported by Aydin, *et al.*^[2] Suggested causes are vasospasm, microvascular dysfunction, rhythm and conduction disturbances. However, mechanisms, progression and optimal treatment are currently unknown.^[1,2]

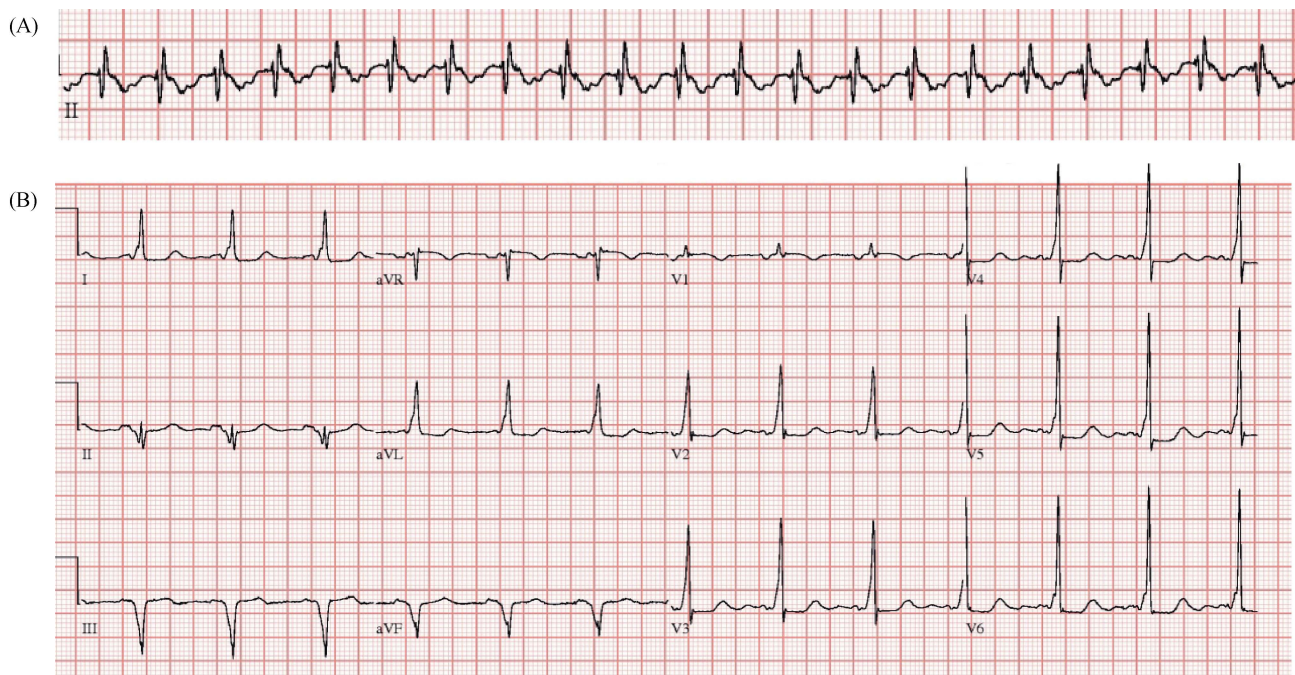


Figure 1. The initial ECG showing supraventricular tachycardia (A) and follow-up ECG (after adenosine administration) showing WPW pattern (B).

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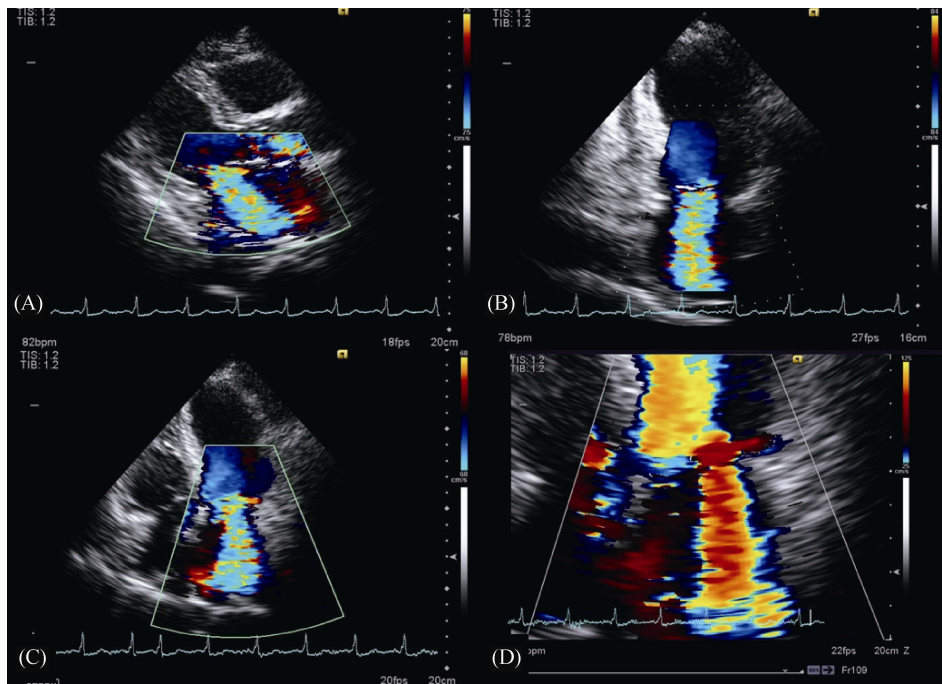


Figure 2. The echocardiography showing severe mitral regurgitation with mitral valve prolapse of mid portion of anteromedial valve leaflet (A2).

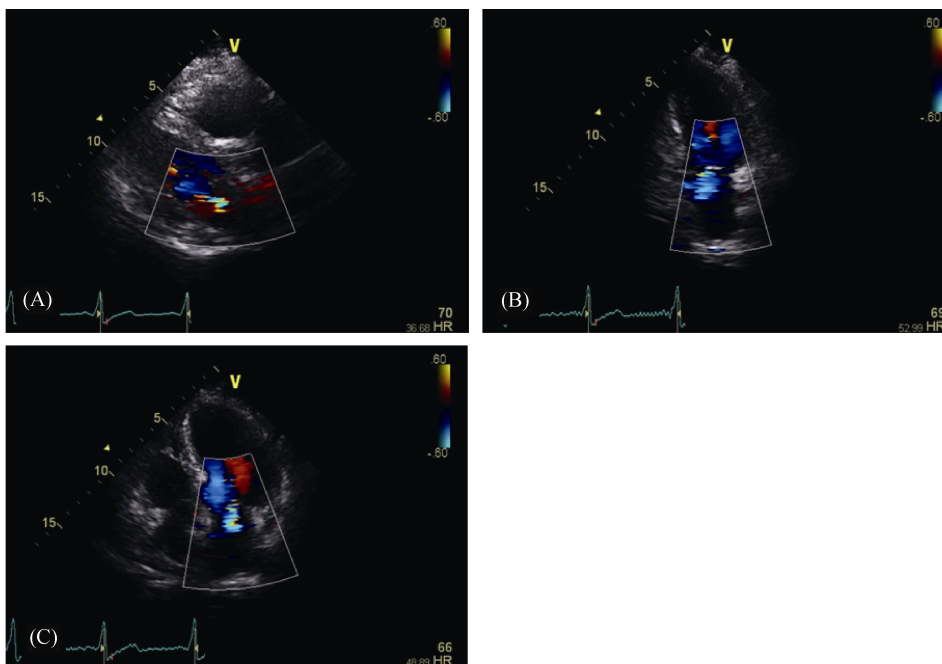


Figure 3. The follow-up echocardiography (after a month) showing mild mitral regurgitation of Grade I.

References

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