Rapid Intraventricular Clot Dissolution with Enoxaparin in Ischemic Cardiomyopathy

Vaibhav Ingle¹, Aneeta Datey², Anand Verma³, Zubin Gandhi⁴

¹Assistant Professor, Department of Medicine, All India Institute of Medical Sciences, Bhopal, Madhya Pradesh, India, ²Professor, Department of Medicine, Shri Aurobindo Institute of Medical sciences, Indore, Madhya Pradesh India, ³Associate Professor, Department of Medicine, Shri Aurobindo Institute of Medical sciences, Indore, Madhya Pradesh, India, ⁴Resident, Department of Medicine, Shri Aurobindo Institute of Medical sciences, Indore, Madhya Pradesh, India

A 50-year-old smoker and alcoholic male was admitted (03/01/2014) with 1 month history of progressive exertional dyspnea and paroxysmal nocturnal dyspnea, tender hepatomegaly, and anasarca. He had regular, feeble pulse at 100 a minute, blood pressure of 90/70 mm Hg, severe pedal edema, raised JVP, tender hepatomegaly with significant hepatojugular reflux and moderate ascites. Cardiopulmonary examination revealed biventricular enlargement, normal heart sounds, no murmur, a moderately large right sided pleural effusion, bilateral rhonchi, and crepitations. He was treated for ischemic dilated cardiomyopathy with congestive cardiac failure since past 2 weeks. Electrocardiogram showed QS complexes in the inferior and precordial leads suggestive of old inferior and extensive anterior wall myocardial infarction. The two-dimensional echocardiography 2 weeks back (18/12/13) showed globally hypokinetic ventricles, left ventricular ejection fraction (LVEF) 14 %, moderate mitral regurgitation (MR) and grade IV tricuspid regurgitation (TR) but no intrachamber clots (Figure 1).

Though not themselves thrombolytic, use of high dose heparin or enoxaparin, relayed with warfarin, results in dissolution of cardiac clots.¹,² Our patient achieved rapid dissolution of big clots because they were recent and effective treatment of heart failure improved the ejection fraction thereby reducing stagnation. Such rapid ventricular clot dissolution with heparin is not reported very often. A case of antiphospholipid antibody syndrome had the disappearance of an intracardiac clot within 24 h³ of starting enoxaparin.
Points to Ponder
1. Ventricular clots are sequelae of severe ventricular dysfunction.
2. Anticoagulants (injectable heparin relayed by oral warfarin) can effectively dissolve clots with minimal complications.

REFERENCES