Association of inverted Takotsubo cardiomyopathy with postpartum pneumo-mediastinum: when a “broken lung” meets a “broken heart”

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Six hours after an uneventful delivery, a 30-year-old primiparous woman complained of pleuritic-type chest pain and sense of immense apprehension. Initially, Troponin-I (Tn-I) level was normal (0.01 ng/mL), but D-dimer was elevated (1200 µg/L). Pulmonary embolism was excluded by a computed tomography scan, which revealed signs of pneumo-mediastinum and subcutaneous emphysema (a). Shortly after, due to raised Tn-I level to 1.88 ng/mL and T-wave inversion in anterior precordial leads, she was referred to us. Angiography disclosed normal coronary arteries (b, c), but wall-motion abnormalities (WMA) in basal segments were noted (d). Cardiac magnetic resonance imaging excluded late gadolinium enhancement (e, f). Transthoracic echocardiography showed significant hypo- to akinesis of basal inferior and posterior left ventricular wall and dyskinesis of basal anteroseptal segments (g, h). Estimated ejection fraction (EF) by 3D quantification was 27 % (i, j). This peculiar pattern of WMA with clinical settings and normal coronary arteries was consistent with reversed/inverted Takotsubo cardiomyopathy (ITC). She received appropriate management with beta-blockers and angiotensin-converting enzyme inhibitors. EF was completely normalized after 1 month (k, l). To the best of our knowledge, this association of pneumo-mediastinum and ITC has not been reported. Notably, ITC occurs more

frequently in younger age and is more commonly associated with mental stress than the typical forms of Takotsubo cardiomyopathy.

Conflict of Interest

No potential conflict of interest related to the article exists.

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