

**Conclusions.** It is important to identify the ECG signs of Wellens' syndrome and provide appropriate treatment in due time, as this ECG pattern is a sign of instability which can evolve any time into an extensive MI with high mortality and disabling rates.

**Key words:** Wellens syndrome, myocardial infarction, sub occlusive stenosis

#### **240. TAKOTSUBO CARDIOMYOPATHY (TTS) – A DISEASE THAT MIMICS AN ACUTE CORONARY SYNDROME**

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**Background.** TTS, also known as stress cardiomyopathy and "Broken Heart Syndrome", is a cardiac syndrome that appears suddenly and implies transient left ventricular systolic dysfunction leading to heart failure symptoms. It frequently occurs following a significant stress. Available data report about 1.7-2.2% of patients with suspected ASC to be subsequently diagnosed with TTS. The aim is to present a TTS clinical case and the differential diagnosis with an ACS.

**Case report.** A 62 years old, female, presented with: compressive chest pain, lasting >6 hours without relieve at rest or on nitrates, shortness of breath at mild exertion and fatigue. Symptoms onset at 2 days following a major stress (death of the only brother). Other symptoms: palpitations, dizziness. Objective: mild uncle swelling. Cracking murmurs in the lower lung fieldson auscultation. Heart rate 86 bpm, BP- 140/80 mmHg, SaO<sub>2</sub> – 95%. Laboratory testing: troponin I – 4.8ng/ml (reference limit 0.3ng/ml), NT-proBNP – 10236pg/ml. ECG: Sinus rhythm, HR – 86 bpm, normal axis, inverted T-waves in I, II, aVL, V3-V6. Echocardiography: moderate LV dilatation: diastolic diameter 57mm, systolic diameter 40mm, LV apical akinesia, middle segments hypokinesia, mild concentric hypertrophy of the LV(septum 12mm, posterior wall 12mm), moderately abnormal systolic function, EF - 39%. Non-STE ACS was suspected and the patient was admitted in the CCU for 48h, and a cardiology ward for 4 days afterwards. Treated with: nitrates, heparins,  $\beta$ -blockers, ACE-inhibitors, aspirin and diuretics. Coronarography (performed on the 2nd day of admission): no significant lesions identified. Non-STE ACS ruled out and TTS presumed. At 4 days: troponin I –1,3ng/ml, NT-proBNP– 3455pg/ml. At discharge troponin I –0.14ng/ml, NT-proBNP- 460pg/ml. Echo: mild LV dilation: diastolic diameter 54mm, systolic diameter 37mm, LV apical hypokinesia, mildly abnormal systolic function EF – 50%, in rest – the same. At 20 days from symptoms onset: ECG: HR 74bpm, normalization of the T waves, in –rest the same. Echo: no wall motion abnormalities, EF 63%, complete recovery of the LV function. TTS confirmed.

**Conclusions.** TTS is a rare condition which can be suspected when ECG changes and LV wall motion abnormalities present at echo without respecting a specific coronary pool and no culprit lesion is identified at coronarography. An ACS is to be, firstly, ruled out. The diagnosis is confirmed only after the recovery of the LV function.

**Key words:** Stress cardiomyopathy, Takotsubo, acute coronary syndrome, hypokinesia, akinesia.