

GW23-e1122

# CLINICAL ANALYSIS OF III ATRIOVENTRICULAR BLOCK AND SHOCK CAUSED BY ACUTE PANCREATITIS

doi:10.1136/heartjnl-2012-302920s.3

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**Objectives** Acute pancreatitis is very common, but in this case typical symptoms such as acute and persistent abdominal pain did not occur. The first complaint was syncope, III atrioventricular block, shock. Such cases are reported as follows

**Methods** Case: Female patient, 29 years old, was admitted into the emergency department. Chief complaint: Intermittent nausea for 1 day accompanied by intermittent convulsions. Soon afterwards, loss of consciousness and convulsions occurred and the blood pressure lowered. The ECG monitoring showed: III degree atrioventricular block, ventricular fibrillation. Her blood pressure was still unstable after we performed defibrillation and temporary pacemaker implantation at bedside. So, we performed abdominal ultrasound emergently: Hepatic vein and inferior vena cava widened; blood routine examination, amylase, and electrolytes were normal, renal function: Urea 7.94 mmol/l, the rest were normal, blood glucose 8.22 mmol/l; myocardial enzyme spectrum: Aspartate aminotransferase 335 U/L, Lactate dehydrogenase 563 U/L, Creatine kinase 786 U/L, Creatine

kinase isoenzyme 59 U/L. Then under the protection of the temporary pacemaker, the patient was admitted under the diagnosis of 'severe acute viral myocarditis III degree atrioventricular block Adam-Stoke syndrome'. Past medical history chronic cholecystitis, no history of smoking and alcohol abuse; She said that she was allergic to Penicillin. Physical examination: Blood Pressure (BP): 83/53 mm Hg (maintained under Vasopressors), grimacing, her skin was clammy, her mucosa was not stained with jaundice, rash, or bleeding. Her lungs' breath sound clear and wet or dry rales were not heard. The heart border bore no expansion. Heart rate 100 bpm, Mild tenderness in the left upper abdomen. ECG: pacing rhythm. Admission diagnosis: Severe acute myocarditis III degree atrioventricular block Aspen syndrome, cardiogenic shock. Cholecystitis. serum amylase was checked again after admission: 141 U/L, Abdominal ultrasound: Gallbladder wall thickness and peritoneal effusions. We performed abdominal paracentesis and drew 200 ml ascites which was pink and clear. Ascites routine: Leukocyte 50/ul, Red blood cells 4750/ul, Albumin 41.8 g/l, Rivolta++, Proportion 1.018. All the data showed it was bloody exudative fluid. Emergency Abdominal CT: The head of the pancreas was slightly plump, surrounded by exudative lesions, possibly pancreatitis. The right kidney volume increased with slightly higher density of internal capsule, bilateral pleural effusion, gallbladder wall thickening with exudation surrounding, possibly cholecystitis, Ascites. Blood routine: Leukocyte  $16.55 \times 10^9/l$ , Neutrophils  $14.37 \times 10^9/l$ , Red blood cell  $4.46 \times 10^{12}/l$ , Hb129 g/l, PLT  $185 \times 10^9/l$ ; Myocardial enzymes: Aspartate aminotransferase 335 U/L, Lactate dehydrogenase 508 U/L,  $\alpha$ -hydroxybutyrate dehydrogenase 495 IU/L, Creatine kinase 538 U/L, Creatine kinase isoenzyme 61 U/L; blood glucose: 10.61 mmol/l; blood calcium 2.01 mmol/l; renal function: Urea 11.33 mmol/l; liver function: total Bilirubin 32.4  $\mu$ mol/l, direct bilirubin 9.9  $\mu$ mol/l, indirect bilirubin 22.5  $\mu$ mol/l, Alanine aminotransferase 106 U/L; Amylase 77 U/L. Corrected diagnosis: 1. Severe acute pancreatitis third degree atrioventricular block Adam-Stokes syndrome, 2. septic shock 3. cholecystitis. Given temporary pacemaker, fluid infusion, anti-shock treatment, anti-pancreatic exocrine, anti-inflammatory treatment, bedside ultrafiltration, ventilator-assisted breathing and supporting treatment, condition gradually improved and she discharged from hospital 4 weeks later.

**Results** The patient was young women, 29 years old, without acute, persistent abdominal pain etc she was identified as III Atrioventricular block, syncope, shock<sup>1</sup>- clinical symptoms of cardiovascular diseases, which was very dangerous and progressed very fast. Multi system failure came out soon and this kind of patients suffered a high mortality, and was difficult to save. There was no report on acute pancreatitis complicated by 'III Atrioventricular block,' for 10 years. Li Hongtao reported [1]: 85 cases of hospitalised patients with acute pancreatitis associated with arrhythmias, 50% of them' ECG showed: ST-T segment change, II atrioventricular block, mainly premature ventricular contractions, among them, the mortality of those who was associated with ST-T segment change was higher. Chen Jinsong [3] reported 1 case of patient with acute pancreatitis associated with tachyarrhythmias, HR 165 bpm, Complete right bundle branch block. The tachyarrhythm cannot be terminated by drug or oesophageal pacing and the patient died after 4.5 h. Such reports showed that acute pancreatitis associated with tachyarrhythmias are more common than those associated with slow arrhythmias. The mortality of acute pancreatitis associated with arrhythmias is high.

**Conclusions** This patient symptoms of acute pancreatitis were not typical. Amylase of blood and urine were normal. Myocardial enzymes, liver enzymes were abnormal, Chest X-ray: Heart shadow did not enlarge, Echocardiography: EF Left ventricular internal diameter were normal, Pleural effusion and ascites cannot be explained by acute severe myocarditis. Thus we need to broaden our insights, and

imagine if there are other reasons beside cardiovascular diseases. More and more acute pancreatitis 'chief complaints were cardiovascular symptoms, and were admitted in by department of Cardiology. Most of them were appropriately treated after 2–3 days' examine. However, some patients were misdiagnosed because there were no symptoms such as acute, persistent abdominal pain and higher amylase. So, as a clinicians, we must observe patients carefully to reduce References: Rheumatic and valvular heart disease