Dear Editor

In emergency department, physicians can diagnose pulseless electrical activity, asystole, pericardial effusions, ischemic heart disease, wall motion abnormalities, valvular cardiac disease volume status or global cardiac function evaluating with electrocardiographic findings or using bedside cardiac ultrasonography. But these two methods are not always sufficient to explain the underlying another pathologies such as pancreatitis and acute cholecystitis which can mimic acute cardiac events. Patients who are followed up with a preliminary diagnosis of acute coronary syndrome in the emergency department, might have underlying biliary or pancreatic pathologies, or even more, these might be the sole reason of the clinical picture. So bedside abdomen ultrasonography and liver enzymes may be requested in all patients with suspected cardiac pathology with a normal cardiac ultrasonography when a patient presented with acute chest or abdominal pain. Physicians must be aware for coexisting pathophysologies and take into account the differential diagnosis of all life-threatening causes such as cardiac ischemia or acute abdominal situations. So the diagnostic tests for gallbladder pathology could be added to cardiac ultrasonography.

Keywords: Cardiobiliary reflex, Acute coronary syndrome, Ultrasound

In acute pancreatitis, pancreatic proteolytic enzymes such as trypsin may have resulted in direct injury to the pericardium or myocyte membrane leading to changes in cell

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permeability with possible necrosis and electrical changes seen on ECG such as T wave inversion, ST segment depression or ST segment elevation (5,6). Both acute pancreatitis and acute cholecystitis with gallbladder distension are clinical disorders which could be a reason of the increased troponin I level (2,5). Although elevated troponin levels in acute cholecystitis are mainly due to cardiobiliary reflex, myocardial stunning, a direct cardiac toxic effect by pancreatic proteolytic enzymes, electrolyte abnormalities and coronary vasospasm might be other reasons for elevation of cardiac biomarkers in acute pancreatitis (5). So we strongly believe that, patients who are followed up with a preliminary diagnosis of ACS in the emergency department, might have underlying biliary pathologies, or even more, this might be the one and only reason of the clinical picture. So beside abdomen ultrasonography and liver enzymes may be requested in all patients with suspected cardiac pathology with a normal cardiac ultrasonography. In conclusion, when a patient presented to emergency department with acute chest or abdominal pain, the diagnostic tests for gallbladder pathology should be added to cardiac ultrasonography.

Ethical issues
Not applicable.

Author’s contribution
All authors contributed to the intellectual planning of the project, intellectual analysis of the data, and writing of the paper.

References