

Is Troponin T a Useful Marker of Myocardial Damage in Acute Pancreatitis?

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Context Elevated serum concentrations of troponin T (cTnT) were anecdotically found in patients having acute pancreatitis. **Objectives** To evaluate the serum levels of cTnT in a consecutive series of patients with acute pancreatitis during the first 72 hours of the disease. **Methods** Thirty-seven consecutive patients with acute pancreatitis were studied within 24 hours after the onset of pain, having normal renal function at the time of the study and without clinical or electrocardiographic signs of acute myocardial infarction. Serum cTnT, amylase, lipase and C-reactive protein (CRP) were assayed on admission and for two consecutive days using commercially available kits. **Results** No significant modification of overall serum cTnT concentration was found during the 3 days of the study ($P=0.768$) while amylase and lipase activity significantly decreased ($P<0.001$) and CRP significantly increased ($P<0.001$). In addition, no significant differences in serum cTnT concentrations ($P=0.270$) and serum amylase ($P=0.136$) and lipase ($P=0.916$) activity were found between patients with

mild and those with severe pancreatitis during the three days of the study, whereas serum CRP was significantly higher in those with severe pancreatitis as compared to those with mild disease during the entire study period ($P<0.001$). There were also no significant differences in the serum concentrations of cTnT, amylase, lipase and CRP among the various etiologies of the disease. The ROC curves for serum cTnT, amylase, lipase and CRP used in assessing the severity of acute pancreatitis showed that cTnT (AUC \pm SE: 0.625 ± 0.053 ; $P=0.025$) and CRP (AUC \pm SE: 0.916 ± 0.027 ; $P<0.001$) had an area significantly different from 0.5; thus, only these two molecules were selected as predictors of acute pancreatitis severity. The accuracy of CRP was significantly higher than that of cTnT ($P<0.001$). **Conclusions** The presence of elevated levels of cTnT in patients with acute pancreatitis without clinical or electrocardiographic signs of acute myocardial infarction should be noted and these findings should be interpreted as possible rhabdomyolysis and not as acute cardiac injury.