

## 18.5.02

### WHEN CARDIAC TAMPONADE BECOMES A RESULT OF LEFT VENTRICULAR APEX RUPTURE FOR CARDIAC STABBING IN A 28 YEAR OLD MALE

A. Rezazadeh<sup>1\*</sup>, A. Samady<sup>2</sup>, M. Saghi<sup>2</sup>

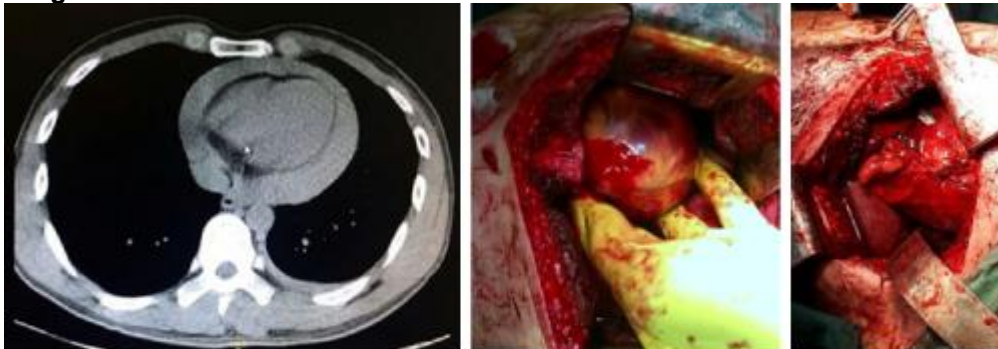
<sup>1</sup>Department of Surgery, <sup>2</sup>School of Medicine, Ardabil University of Medical Sciences, Ardabil, Iran, Islamic Republic Of

**Introduction:** Cardiac trauma is considered as an emergency and due to its higher mortality rate its management is a challenge for trauma teams. It is often in the result of direct penetrating injury, vehicle accidents and sporadically during percutaneous cardiac intervention. However, even today, about 90% of the victims die before reaching the hospital. Mortality is higher in patients with cardiac tamponade.

**Materials & Methods:** Here we are describing a 28 year old male with a stabbing in his subxiphoid region as long as 0.5 centimeter. He was conscious but lethargic with initial vital signs as blood pressure=100/70, heart rate=90, respiratory rate=24, and palpable peripheral pulses, no signs of decrease in respiratory sounds but relatively elevated jugular venous pressure. Focused assessment with sonography for trauma was suspicious to cardiac tamponade. For surveying other probable contemporaneous lesions of lungs, heart, and diaphragm a thoracic and upper abdominal CT scan was performed. Then due to sudden changes in hemodynamic he was undergone pericardiocentesis twice that totally 50 cc blood was evacuated. Continuing resuscitation in the operating room immediately anterolateral thoracotomy was done which revealed an extensive cardiac tamponade compressing the heart severely. After pericardiotomy, the operation team encountered spurting blood from the site of through and through ruptured left ventricular apex that in no time was reconstructed by horizontal suturing with Prolene and using pericardial fat pledget.

**Results:** Controlling the bleeding source, a pericardial chest tube was performed then the patient was transferred to the intensive care unit. After surgery he improved promptly.

**Image:**



A thick rim of blood accumulation around the heart in an axial section of non-contrasted thoracic CT scan in the left (arrows), blood spurting from ruptured beating heart apex during left lateral thoracotomy in the middle and reconstructed heart wall using pericardial fat pledget in the right pictures.

**Conclusion:** Considering that, almost always patients with cardiac penetrating traumas refer to general trauma centers, it is necessary to general surgeons to know the basis of confronting with these vital surgeries in the absence of cardiopulmonary pump.

**Disclosure of Interest:** None declared