PP105 CARDIAC TAMPONADE IN TRAUMA: REAL-TIME ULTRASOUND GUIDED APPROACH OF PIGTAIL INSERTION

Z Che Isa[1], J Md Noor[2],

[1]Emergency and Trauma Department, Hospital Sungai Buloh
[2] University Teknologi Mara

BACKGROUND

Cardiac tamponade is an accumulation of fluid in pericardial sac of sufficient volume and pressure to impair cardiac filling. It is a life-threatening condition hence the need for emergency pericardiocentesis is urgent. Although pericardiocentesis is a life-saving procedure it has been associated with serious complications. This may be reduced by employing a real-time ultrasound-guided pericardiocentesis.

OBJECTIVE

We report a case of unstable poly-trauma with multiple injuries including cardiac tamponade. Pericardiocentesis with parasternal approached was done using a real-time ultrasound-guided approach. Post-procedure, the haemodynamic conditions improved enabling transfer for more definitive management of the intra-abdominal injury.

CASE REPORT

A 16 years old gentleman referred to our centre from district hospital following a motor vehicle accident with polytrauma. He was initially resuscitated in the district hospital and transferred to our centre for persistent hypotension and further management. The initial e- FAST upon arrival to our centre revealed intra-abdominal free fluid with spleenic and liver injury, as well as pericardial effusion with right ventricular diastolic collapse. The thickest fluid accumulated in the pericardial sac is seen at the parasternal region hence the pericardiocentesis was approached from this site. Post-procedure ultrasound showed resolution of cardiac tamponade, pig tail in pericardium and no pneumothorax. This was confirmed by chest x-ray. The patient was then sent to operation theatre for laparotomy. There was no surgical intervention done following the pericardiocentesis

CONCLUSION/DISCUSSION

Real-time point of care ultrasound able to identify the safest site for pericardiocentesis, assist in the procedure and detect immediate complications if present.