Background
A young male patient sustained trauma after falling from height, with unrecordable blood pressure when attended to by pre-hospital doctors. Resuscitative balloon occlusion of the aorta (REBOA) was performed to avoid major haemorrhage and death from severe blunt pelvic injury. The REBOA was inserted and inflated within the distal aorta. The patient was then urgently transferred to the nearest major trauma unit. On arrival, he had developed a cold, pulseless right lower limb.

Imaging
An urgent CT scan showed:
1. Pelvic fracture with evidence of active haemorrhage (Figure 1).
2. REBOA sited within the proximal right common iliac artery, with the insertion site seen to be within the right superficial femoral artery (SFA) instead of common femoral artery (CFA) (Figure 2)
3. Traumatic thoracic aortic injury

Discussion
This complex patient sustained a significant polytraumatic injury, with a number of injuries amenable to endovascular treatment. Prioritisation was important in decision-making, to ensure the correct injuries were managed in a timely manner.

The pelvic vascular injury was addressed first, as this was the source of the patient’s haemorrhage and haemodynamic instability, necessitating REBOA. This led to an increase in blood pressure, but permissive hypotension was employed by the anaesthetic team to mitigate worsening of the aortic injury.

The SFA injury was managed next to avoid limb ischaemia and its sequelae. The thoracic aortic injury was then treated, and following closure of the CFA arteriotomy, both haemodynamic stability and limb perfusion were restored.

Summary
The first pre-hospital REBOA insertion in a case of severe blunt pelvic trauma was successful. Despite multiple injuries sustained, a rational approach resulted in three areas treated endovascularly and patient survival.