

86. Limb Ischaemia: A Lethal Vascular Complication of Intra Aortic Balloon Pump

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Body

A 68 years old lady with underlying diabetes mellitus, hypertension and dyslipidaemia, presented with central chest pain for 3 days but worsening on the day of presentation to the hospital. The blood pressure was 130/80 mmHg and heart rate 84 beats per minute. Her lung field was clear on auscultation with normal heart sounds, without murmur. Electrocardiogram showed ST elevation lead aVR with ST depression I, aVL, V4-V6. She was immediately sent for primary percutaneous coronary intervention.

Coronary angiogram revealed severe triple vessel disease with left main stem involvement but no acute thrombus seen. Echocardiogram showed reduced left ventricular ejection fraction of 38% with multiple areas of hypokinesia. All the valves were normal. She was referred to cardiothoracic surgeon for in-patient coronary artery bypass graft surgery. However, she had few episodes of hypotension in ward with intermittent angina. No evolving ECG changes.

Sheathless intra aortic balloon pump was inserted via right femoral approach and started on heparin infusion as per protocol, while awaiting for bypass surgery. Her activated partial thromboplastin time was kept 2 to 3 times of upper limit normal. Regular lower limb pulses were checked. However, within 36 hours of intra aortic ballon pump insertion, she developed acute right lower limb ischaemia and the intra aortic balloon pump was immediately removed.

Procedure Step: Sheathless Intra Aortic Balloon Pump was previously inserted via right femoral approach. Due to acute limb ischaemia, it was immediately removed. Percutaneous transluminal angioplasty to right lower limb was done via left femoral approach. Fortress 6F catheter was used. Noted total occlusion at right femoral artery till external iliac artery. Thrombus aspiration was done but distal embolization of thrombus occurred. Total of 3 runs of thrombus aspiration using Penumbra in order to establish good flow to the right lower limb. Despite establishing flow to the limb, patient's condition deteriorated with cardiac arrest on table.

Discussion: Though IABP is widely used in cardiac catheterization laboratories, its insertion is associated with complications such as acute limb ischaemia. Thus, we aim to highlight this uncommon but lethal complication of IABP insertion. Perhaps clinicians need to justify the pros and cons of IABP and use in compelling indication only. Early recognition of vascular complication and timely intervention are essential in order to save the limb as well as the patient's life. Delay in recognizing acute limb ischaemia will lead to disastrous sequelae and may affect the outcome of the intervention to salvage the limb. In this case, despite early recognition of acute limb ischaemia and attempt to reperfuse the limb, severe metabolic acidosis due to limb ischaemia has led to cardiac arrest.

