471521 - CASE REPORT: PRE-OPERATIVE INTRA-AORTIC BALLOON PUMP FOR ELECTIVE ABDOMINAL PERINEAL RESECTION IN A PATIENT WITH POOR LEFT VENTRICULAR FUNCTION

Frank Min, MD, Christopher Harle, MBChB
Anesthesiology and Perioperative Medicine, University of Western Ontario,
London, ON, Canada

Purpose: To describe the elective use of an intra-aortic balloon pump (IABP) in a patient with severe ischemic cardiomyopathy undergoing an abdominal perineal resection, and to review the perioperative use of IABPs for non-cardiac surgery.

Clinical Features: Patient consent has been obtained in accordance with local institutional guidelines. A 51-yr-old man with carcinoma of the rectum was booked for an elective abdominal perineal resection. The patient had significant co-morbidity, including a history of previous severe anterior myocardial infarction, with an estimated left-ventricular ejection fraction of 15%. It was felt that he was optimally medically managed, and myocardial revascularization was not an option. A thoracic epidural catheter and a radial arterial line were placed prior to induction of anesthesia. Following induction, a central venous catheter, a pulmonary artery catheter and an IABP were inserted. There was an estimated blood loss of 300 ml. The patient remained stable throughout the procedure and the postoperative recovery was also uneventful.

Conclusion: Pre-operative use of an IABP has been suggested to be beneficial in high-risk patients undergoing urgent coronary artery bypass surgery (1). Although the effectiveness of IABP in elective non-cardiac surgery has not been determined, its successful use has been described (2-4). Prophylactic placement of an IABP should be considered in patients with uncorrectable coronary artery disease and poor left ventricular function undergoing major elective surgery, as a means to reduce cardiac morbidity and mortality.

References: 1. Cochrane Database Syst Rev. 2007 Jan 24;(1):CD004472 2. Br J Anaesth. 2005 May;94(5):688-9 3. J Clin Anesth. 1999 Jun;11(4):342-5 4. Arch Surg. 1998 Jun;133(6):632-5