PO 14 - ANESTHESIA FOR AN ASA IV PATIENT WITH MYOCARDIAL INFARCTION FOR NON-CARDIAC SURGERY

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Introduction: The incidence of ischemic heart disease has been increasing in recent years, which leads to an increase of patients with this pathology who are proposed for non-cardiac surgical procedures. These patients are more likely to experience cardiovascular (CV) events with superior morbidity and mortality during the perioperative period.[1,2] The preoperative optimization is indispensable to reduce this risk and decrease the occurrence of adverse postoperative events.

Case report: Male, 73-years-old, with history of hypertension, dyslipidemia, type 2 diabetes, myocardial infarction (MI) with angioplasty and stent placement in 2006. Presented in the emergency department with macroscopic hematuria and anemia which conducted to a type two MI, decided to conservative treatment. After ten days of hospitalization, he underwent diagnostic cystoscopy with biopsy of an unresectable lesion. In the day after surgery, a new episode of MI occurred. Mono antiplatelet therapy with aspirin was started and coronary angiography was decided, revealing multivessel disease. The performance of coronary stenting was denied due to the lesions' anatomy and the hemorrhagic risk and coronary artery bypass graft was postponed due to the absence of anatomopathological diagnosis of the lesion, identified afterwards as an urothelial carcinoma. It was decided to maintain only aspirin and the patient was transferred to the coronary intensive care unit (ICU). After 3 weeks of the cardiac event, he was proposed to radical cystectomy. His physical status was ASA IV and preoperative optimization included regular transfusions of red blood cell concentrates with the aim of a preoperative hemoglobin above eight g/dL. Standard ASA monitoring using five leads electrocardiogram plus bispectral index, invasive arterial pressure and measurement of cardiac output was instituted and induction with etomidate was performed. The patient remained hemodynamically stable with blood pressures maintain within the recommended intervals due to a perfusion of norepinephrine. He was extubated after five hours of surgery and admitted to an ICU for clinical surveillance. Post-operative period was uneventful, no cardiovascular complications occurred, and the patient was discharged to the urology nursery 3 days after surgery.

Discussion: The American Heart Association guidelines consider that major non-cardiac procedures should wait at least 4-6 weeks (ideally 6 months) after a CV event.[1,3] In the case presented, the proposed surgery was an integral part of the treatment of the ischemic condition, allowing the resolution of hematuria and anemia and being imperative to perform it in advance to

prevent new events, counterbalancing the risks associated with the hemorrhagic and thrombotic scenario.

References: 1. Indian journal of anaesthesia, 2017; *61*(9), 705-11; 2. British Journal of Anaesthesia, 1981, 53(7), 757-765; 3. American heart journal, 1981, 102(6 Pt 1), 1029-1037.