**Título:** THE HEART OF THE MATTER – THE PERIOPERATIVE MANAGEMENT OF A PATIENT WITH HYPERTROPHIC CARDIOMYOPATHY

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**Resumo:**

Hypertrophic cardiomyopathy (HCM) is the most common genetic cardiac disorder. It's characterized by asymmetric left ventricle (LV) hypertrophy frequently associated with dynamic obstruction of the LV outflow tract (1).

This disease may be worsened by factors associated with anaesthesia and the surgical stimulus leading to congestive heart failure, myocardial ischemia, systemic hypotension, supraventricular or ventricular arrhythmias and even sudden death (1).

As HCM patients (with or without LV outflow obstruction) undergoing noncardiac surgery frequently experience adverse perioperative outcomes, the purpose of this case report is to discuss the anaesthetic management of a patient with this condition, proposed for urgent orthopaedic surgery (2).

A 58-year-old patient, ASA III, presents with multiple spine and leg fractures following an automobile accident. During the preoperative evaluation, the diagnosis of HCM and a family history of sudden cardiac death were discovered. The patient’s cardiologist was consulted and routine preoperative exams were required. Before the orthopaedic procedure ASA standard monitoring was placed, as well as an arterial line for a more accurate hemodynamic monitorization. After an etomidate induction, anaesthesia was maintained with sevoflurane. Care was taken to maintain mean arterial pressure above 65 mmHg, as well as a stable electrolytic balance. Preventive cardiac arrest measures were also ensured, namely putting defibrillation pads in place, should need for them arise. The surgical procedure went on uneventfully as the patient remained stable throughout. Regardless, postoperatively the patient was monitored closely for the first 24h in an intermediate care unit setting as a precaution for any late onset cardiac events.

The purpose of this case report is to discuss the anesthetic management of a patient with HCM, highlighting the need for an open communication between different specialties on an urgent surgery setting (2). Additionally, it brings to light the importance of carefully evaluating the patient pre-operatively, as diseases like HCM can easily slip by. It is the job of the Anaesthesiologist to be one step ahead, anticipating what could go wrong, for the well being of the patients.

Key words: hypertrophic cardiomyopathy; orthopaedic surgery; sudden cardiac death; perioperative management

References:

(1) Eur Heart J (2014) 35:2733-2779

(2) Ann Card Anaesth. 2010;13(3):253–6.