**Título:** ANAESTHETIC MANAGEMENT FOR CAESAREAN IN A PATIENT WITH SYMPTOMATIC CHIARI MALFORMATION – CASE REPORT

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**Área Terapêutica/Tema:** Anestesia Obstétrica (Obstetric Anaesthesia)

**Resumo:**

Introduction

Chiari malformations are an increasingly common diagnosis which comprise a very heterogeneous group of anatomic anomalies involving cerebellum, brainstem, and craniocervical junction. There are 3 main subtypes: Chiari I, Chiari II and Chiari 1.5, which is a hybrid condition with downward displacement of cerebellar tonsils and compression of the medulla, without meningomyelocele. The management of pregnant women with Chiari malformation is not consensual, especially in symptomatic patients.

Clinical case

A 35-yr-old primigravida, 38 weeks and 3 days of gestation, with the diagnosis Chiari type 1.5 malformation. Associated symptoms and complications included Valsalva induced occipital headache, occasional oscillopsia and vertigo, history of dysphagia and severe central sleep apnea with need for continuous positive airway pressure (CPAP). Due to clinical implications, patient was proposed surgical decompression by the time of diagnosis, however she declined surgical intervention. The patient also presented well controlled asthma, obesity type II, stable hypothyroidism and gestational diabetes under 1g of metformin daily.  Pregnancy proceeded regularly, without complications. After the opinion of neurology and neurosurgery favoring an elective caesarean delivery, surgical and anaesthetic management was discussed and accepted by the patient: an elective caesarean section under general anesthesia, with a postoperative overnight in post anaesthetic care unit (PACU). A rapid sequence induction was performed and the patient was intubated using a c-mac video laryngoscope. The patient remained hemodynamically stable and with normal glycaemia and temperature throughout the procedure. A healthy male baby weighting 3430 g was delivery 12 minutes after incision, and 55 minutes after induction, the patient was extubated and transferred to the PACU, without any neurological decompensation. Previous therapeutic attitudes, including CPAP, were maintained throughout the hospital stay. After an uneventful 24 hours of observation in the PACU, the patient was transferred to the obstetrics ward. Patient remained stable, regarding previous neurological symptoms and comorbid conditions, with good recovery from the caesarean section and was discharged on the 4th post-operative day.

Discussion

This case contributes to the evidence and debate about the anaesthetic approach in patients with this malformation, namely with regard to patient safety and satisfaction, highlighting inter-disciplinary and patient-doctor communication in perioperative planning. More evidence is needed to provide a better understanding of the conditions under which a neuroaxial anaesthesia may prove to be an equally safe approach for obstetric delivery in women with symptomatic Chiari malformation.