PO 5 - HORNER SYNDROME IN A PARTURIENT AFTER COMBINED SPINAL/EPIDURAL ANESTHESIA

Nuno Alçada[1], Paulo Correia[1], Caroline Dahlem[1], Marcos Pacheco[1]

[1]CHEDV

Background: Horner syndrome (HS) can be described as a tryad of unilateral miosis, ptosis and anhidrosis and is attributed to sympathetic nervous system block of preganglionic fibers that synapse in the superior cervical ganglia[1,2]. It is thought to be an uncommon complication that follows epidural anesthesia[1-3], however some series report high incidences, raising the concern that underdiagnosis may be in play[3].

Case Report: A 27 year old, smoker but otherwise healthy, non-obese, primigravida, was admitted to labor at 41 weeks gestation after induction with prostaglandins. The patient was subjected to a combined spinal-epidural (Kit Portex®) block through the L2/L3 intervertebral space using a median approach for walking epidural protocol: intrathecal 2ml ropivacaine 0.15% and sufentanyl 2.5µg followed by intermittent epidural bolus of 10 ml ropivacaine 0.13% as needed. The epidural catheter was inserted 5cm into the epidural space with cephalad orientation, without complications. Labor carried on uneventfully until 3h later, when an urgent caesarean section was performed due to non-reassuring fetal status. At this time a bolus of 15ml lidocaine 2% and 5µg sufentanyl was administered, followed by hypotension treated with phenylephrine, and a drop in heart rate without bradycardia. Maximal sensitive block was found to be at the T4 level, without sensitive or motor changes detected in the upper limbs or face. Two other analgesic bolus of 8ml 0.2% ropivacaine were administered during the night, at 1:00 am and at 5:00 am, without hemodynamic repercussion. The next morning, during the post-anesthetic visit, right sided ptosis and miosis were noticed. When questioned, the patient mentioned a sensation of heaviness and drooping of the right eyelid after each epidural bolus, with effective analgesia and no other sensitive or motor changes. Symptoms subsided after 4-5h.

Discussion: HS is thought to be uncommon after epidural anesthesia with the majority of cases occurring in parturients subjected to caesarean delivery[1,2]. Nonetheless, a high incidence has been observed in some series, raising concerns that HS is probably being underdiagnosed[3]. The exact mechanism of HS during labor analgesia is unknown and multiple factors are probably involved such as anatomic and physiologic changes in pregnancy and labor, positioning and sympathetic fiber hypersensitivity[1-4]. The most likely mechanism responsible for the development of HS in this case was a cephalad spread of local anesthesia, however, in spite of the lack of other neurologic symptoms, a subdural block cannot be excluded. Most cases are benign and resolve spontaneously after a few hours, but one should bear in mind the possibility of rare, potentially fatal complications[1,2,4].

References:

1. Obstet Gynecol Surv. 2011 Feb;66(2):114-9.
2. Clin Exp Obstet Gynecol. 2017;44(3):337-340.
3. BMJ Case Rep. 2010 Aug 23;2010:bcr0120102698.
4. Turk J Anaesthesiol Reanim. 2015 Jun;43(3):196-8.