Horner's Syndrome following epidural analgesia or anesthesia in labor

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Background

Horner's syndrome is rarely observed in epidural anesthesia; it is characterized by ptosis, miosis and conjunctival hyperaemia in the affected eye¹. The incidence of Horner's syndrome with epidural anesthesia can reach 0.4-2.5% in labor analgesia and 4% in Cesarean sections². In the obstetric anesthesia's department of Centro Hospitalar de Lisboa Ocidental were detected 5 cases of Horner's syndrome until the end of November 2015

Case Report

Parturients' ages ranged from 18 to 36 years old, all of them classified as ASA II. Only one of them had previous history of Horner's syndrome in an epidural analgesia. Four of them developed ptosis with conjunctival hyperemia after analgesic dose with 10 to 15 ml of levobupivacaine 0.25% or ropivacaine 0.2% associated with sufentanil. The fifth parturient developed the same symptoms after anesthetic dose with ropivacaine 0.75%. The mean time of onset of Horner's syndrome was 20 to 45 minutes after epidural injection and the mean time of resolution of all symptoms was 1 to 6 hours. The onset of symptoms was unpredictable; in three cases these occurred after the first administration of local anesthetic in the epidural space, in other case it happened only after the fourth administration and in the last case it occurred after the second administration. In one case of labor analgesia, the parturient developed trigeminal nerve palsy, paresthesia and mild weakness on the right upper limb. This was believed to be the result of subdural migration of the epidural catheter

Discussion

In our obstetric anesthesia's department we have noticed 5 cases of Horner's syndrome in 1579 epidural techniques performed, thus corresponding to a low incidence of 0.3%. Because the onset of symptoms is unpredictable, it is up to the anesthesiologist to decide whether to use or not the epidural catheter again, always taking into account the risks *versus* benefits for each patient

Learning points

Most of the reported cases of Horner's syndrome in pregnant women were after epidural analgesia or anesthesia for labor. This is explained by the anatomical and physiological changes during pregnancy and labor which will favor cephalic spread of local anesthetics³. Early diagnosis prevents the anxiety of the parturient and it is essential for the prevention of more serious complications¹

References

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