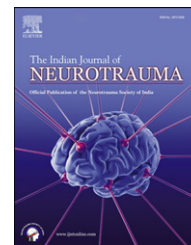


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Successful treatment of chronic subdural haematoma after epidural anaesthesia for labour

Juan F. Martín-Lázaro^{a,*}, Olmos Eduardo^b, Belén Jiménez^a, María Asunción Navarro^a, Juan Bosco Calatayud^b

^a Intensive Care Unit, University Clinical Hospital Lozano Blesa, Zaragoza, Spain

^b Neurosurgery Department, University Clinical Hospital Lozano Blesa, Zaragoza, Spain

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ABSTRACT

We report on a successful treatment for a very infrequent chronic subdural haematoma after epidural anaesthesia for labour. Our patient presented at the Emergency Department in her 35th day post-partum and, the urgent cranial scan showed a chronic subdural left hemispheric haematoma of 15.8 mm with displacement of middle line and herniation of 14 mm. Chronic subdural haematoma following epidural anaesthesia can occur after 3 to 7 weeks following epidural anaesthesia, and it should be considered even if no complications in the procedure were observed. If haematoma is under 5 mm, without other acute signs, conservative treatment is recommended. Programmed neurosurgery should be performed if haematoma is greater than 5 mm; but if rapid deterioration, urgent neurosurgery must be performed as soon as possible to avoid irreversible damage.

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1. Case report

We report on a 28 years-old healthy Chinese woman who presented at the Emergency Department in her 35th day post-partum, with severe headaches. She went for epidural anaesthesia prior labour and no complications on procedure were observed. She had manifested persistent headaches on the second day after delivering, and she complained of continuous headaches in the following month, not improved with oral analgesia or bed rest. She also referred important metrorrhagia in the puerperal time. She was apyrexial with no photophobia or focal neurological deficit. Blood tests including full blood count, biochemistry and coagulation were normal.

After five previous medical consultations, without other neurological signs except headache, she was put under

observation with a Glasgow Coma Score of 15 and in the absence of any alarming features. In the following 6 hours, she presented acute disorientation, performing a cranial computerized tomography (CT) scan. The CT findings showed a chronic subdural left hemispheric haematoma of 15.8 mm with displacement of middle line and herniation of 14 mm. (Fig. 1). She was intubated, mannitol infusion was initiated and she was transferred immediately to our hospital, because she belonged to a secondary hospital with no Neurosurgical Department.

On arrival to our Intensive Care Unit she had unilateral right mydriasis and non-reactive pupil. In the space of time of 4 hours since transferring the patient and entering the Neurosurgical theatre she deteriorated to GSC of 5 (Movement 4, intubation, ocular response 1). The haematoma was

* Corresponding author. C/ José Moncasi 9, ppal, izda, Zaragoza 50006, Spain. Tel.: +34 677568434.

E-mail address: juanfrancisco@gmail.com (J.F. Martín-Lázaro).

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Fig. 1 – Chronic subdural left hemispheric haematoma (15.8 mm) with displacement of middle line and herniation of 14 mm.

evacuated by craniotomy with two trepans, leaving a drainage in the subdural space. She showed improvement in the next 2 hours, was out of ICU after 3 days, and was discharged from the hospital after 8 days.

2. Discussion

Mechanisms involved in the development of chronic subdural haematoma are not clear. A chronic subdural haematoma following dural puncture is a very rare complication of epidural anaesthesia, and may be cranial or spinal.¹ The cause of this complication is thought to be a leakage of cerebrospinal fluid creating an *ex vacuo* effect allowing the brain to move caudally stretching and tearing veins in the subdural space. The lowering of the intracranial pressure resulting from the escape of cerebrospinal fluid should be about 200 ml/day; the daily production of cerebrospinal fluid. Clinically starts with

a headache 24-48 hours post - epidural blockade with throbbing front-occipital pain which is relieved by bed rest.

Cranial subdural haematomas may be present acutely, sub-acutely or chronically,² unilateral or bilateral,³ with a variety of complaints including headache, altered level of consciousness or even psychiatric symptoms. Acute subdural haematoma usually causes signs or symptoms within seven days of the leakage.⁴ Intracranial subdural haematoma may occur acutely or over a more chronic period after dural puncture of about 3 weeks.⁵

In conclusion, cranial subdural haematoma following epidural anaesthesia can occur after 3 to 7 weeks following epidural anaesthesia and it should be considered even if no complications in the procedure were observed. If haematoma is under 5 mm, without other acute signs, conservative treatment is recommended. Programmed neurosurgery should be performed if haematoma is greater than 5 mm; but if rapid deterioration, urgent neurosurgery must be performed as soon as possible to avoid irreversible damage.

Conflict of interest

No conflict of interest.

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