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Epidural Blood Patch (Ebp) Therapy in the Treatment of Postdural Puncture Headache: a Case Report

Laiany Oliveira de Jesus[1]; Rebecca Maria Nogueira de Sousa[1]; Ariadne Gomes Farias[1]; Paula Bezerra Novaes[1]; Pedro Diógenes Peixoto de Medeiros[2]; Thiciano Sacramento Aragão[2]; Daniel Gomes de Moraes Nobre[2]

1. Universidade Federal Rural do Semi-Árido - UFERSA, Mossoró - RN - Brazil;
2. Universidade Estadual do Ceará - UECE, Fortaleza - CE - Brazil.

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Introduction
Postdural puncture headache (PDPH) is one of the most common complications during neuraxial anesthetic procedures. Regarding epidural anesthesia, complications are associated with inadvertent puncture of the subarachnoid space. The headache develops within five days after the anesthetic intervention, with the cardinal characteristic being the exacerbation of the severity of the headache in orthostatic position. It is usually accompanied by neck stiffness and/or subjective auditory symptoms. Factors such as the type of needle used, the number of attempts and the professional's experience can influence its occurrence. PDPH generally has a self-limited course, resolving within fourteen days with conservative treatment, which includes caffeine-based analgesics, hydration and bed rest.
However, when conservative treatment is unsatisfactory or the headache is severe and disabling, the Epidural Blood Patch (EBP) should be considered. This therapeutic strategy consists of aspirating 20 mL of autologous blood and reapplication into the epidural space, aiming to stop the cerebrospinal fluid (CSF) leak, sealing the puncture site and relieving headache symptoms.
Objective
To report the case of a patient who developed headache after inadvertent puncture of the subarachnoid space during the administration of epidural anesthesia and describe the therapeutic approach adopted, including the use of an Epidural Blood Patch (EBP).
Case report
Female patient, 32 years old, previously healthy, underwent an elective surgical procedure to examine an ovarian adnexal mass. Before surgery, she underwent epidural anesthesia, resulting in an accidental puncture of the subarachnoid space. After recognizing the problem, a new puncture was performed in a different location and the anesthetic block was successfully established in the epidural space. On the second postoperative day, the patient developed an orthostatic headache associated with a complaint of tinnitus. Treatment: Initially, there were attempts at clinical treatment, with hydration, caffeine-based analgesics, non-steroidal anti-inflammatory drugs and corticosteroid therapy. However, these measures were not effective, leading to the decision to perform a transnasal sphenopalatine ganglion block, using a nasal swab soaked in bupivacaine and left for twenty minutes, resulting in partial remission of symptoms. Six hours after the procedure with reduction of the anesthetic effect and the patient reported that the symptoms returned. On the sixth day after surgery, it was decided to perform Epidural Blood Patch (EBP) therapy, which consisted of aspirating 20 mL of autologous blood and reapplication into the epidural space. Results: Total remission of all symptoms and decision to hospital discharge.
Conclusion
Although self- limited, post-dural puncture headache is an important complication of interventional neuraxial procedures. Conservative treatment is a valid option for many patients, but when there is no complete improvement in symptoms, the Epidural Blood Patch should be considered as a highly effective therapeutic strategy.

Keywords: Postdural puncture headache;Postanesthetic complications;Epidural blood patch.