

What is the Reason for Pain Relief? The True Effect of Saline or Washing Out Effect Caused by Saline?

TO THE EDITOR:

We intensively read the recent review, "Is Epidural Injection of Sodium Chloride Solution a True Placebo or an Active Control Agent? A Systematic Review and Meta-Analysis" written by Manchikanti L et al (1). It was described in the article that epidural sodium chloride should not be considered as a placebo and it is effective in the treatment of low back and lower extremity pain. When the efficiencies of epidural local anesthetic and epidural local anesthetic combined with steroid injection were compared, no difference was found between their efficacy.

It has been suggested that local anesthetics exert their long-term effects through the following mechanisms neural blockade altering processing of nociceptive input, the reflex mechanism of afferent fibers, self-sustaining activity of the neurons, and the pattern of central neuronal activities. Although we support the results of this review, we think that a different mechanism may also play a role. In line with this, many studies also support our consideration (2-12).

As we know, sodium chloride solution is given during percutaneous epidural neuroplasty and epiduroscopy. In many studies, it has been shown that the inflammatory mediators originating from the damaged

intervertebral disc in the epidural area are diluted and washed out with saline infusion into the epidural area (2-12). In one study comparing 10% and 0.9% saline used during PEN, showed that both solutions were effective in pain palliation (2). Based on this literature and the experience in our clinic, we think that epidural injection of sodium chloride solution is effective in pain palliation. Can we attribute this pain reducing effect of epidurally administered local anesthetics to the above mentioned mechanism in this review or washing out of the inflammatory mediators?

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