

Liposomal bupivacaine versus bupivacaine hydrochloride: are we changing the outcomes?

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ABSTRACT

Hanns-Christian *et al*¹ conducted a literature review with the objective of determining whether there is a difference in postoperative pain scores and opioid consumption between patients who received liposomal bupivacaine and patients who received bupivacaine hydrochloride.

The authors concluded that the beneficial effect on both postoperative pain scores and opioid consumption was small but not clinically relevant.¹

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The infographic features a central title 'Regional Anesthesia & Pain Medicine' with a subtitle 'Liposomal Bupivacaine Versus Bupivacaine Hydrochloride Are We Changing The Outcomes?'. It includes a lightbulb icon, a person icon with a question mark, and a gavel icon. The main text is divided into three colored boxes: an orange box with a question mark icon asking 'Is there is a difference in postoperative pain scores and morphine consumption between patients treated with liposomal bupivacaine (LB) and bupivacaine hydrochloride?', a blue box listing study details, and a green box stating 'The effect of liposomal bupivacaine on pain scores and morphine consumption was clinically insignificant'. A footer contains the citation and DOI information.

Is there is a difference in postoperative pain scores and morphine consumption between patients treated with liposomal bupivacaine (LB) and bupivacaine hydrochloride?

- 23 RCTs including 1867 patients were included in a meta-analysis.
- Industry sponsored trials were included.
- Pain scores and Morphine Milligram Equivalent (MME) consumption were significantly lower in the LB group at 24 hours (mean difference -0.37 and 0.85 respectively).
- There was no significant difference between both groups at 72 hours. (1)

The effect of liposomal bupivacaine on pain scores and morphine consumption was clinically insignificant

1. Hanns-Christian D et al. The analgesic efficacy of liposomal bupivacaine compared to bupivacaine hydrochloride for the prevention of postoperative pain: a systematic review and meta-analysis with trial sequential analysis. DOI: 10.1136/rapm-2020-102427.
Infographic prepared by Alaa Abd-Elseyed, MD, MPH

Competing interests None declared.

Patient consent for publication Not required.

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REFERENCE

- 1 Dinges H-C, Wiesmann T, Otremba B, Hanns-Christian D, *et al*. The analgesic efficacy of liposomal bupivacaine compared with bupivacaine hydrochloride for the prevention of postoperative pain: a systematic review and meta-analysis with trial sequential analysis. *Reg Anesth Pain Med* 2021;**46**:490–8.