

Category : **Polytrauma**

A204 - Locoregional anesthesia in thoracic trauma: icu outcomes and implications

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Introduction:

Pain management in thoracic trauma patients has, historically, relied heavily on systemic analgesic approaches, mostly opioids, associated with numerous adverse effects. Locoregional anesthesia/analgesia (LRAA), present a promising alternative by specifically targeting pain pathways at the injury site.

Methods:

This study investigates the impact of LRAA on pain management and clinical outcomes in thoracic trauma patients within an ICU setting. It aims to assess the effectiveness of LRAA in reducing pain and its potential to influence ICU-related outcomes.

We retrospectively analyzed 43 LRAA procedures performed on 33 patients. Fourteen procedures were excluded as they were unrelated to thoracic trauma.

Results:

The median age of the patients was 65 years, with a notable male predominance (84%). LRAA techniques included thoracic epidural catheters, erector spinae blocks, and serratus plane blocks.

Our study found that 50% of patients who received LRAA before invasive mechanical ventilation (IMV) avoided intubation ($p < 0,05$; odds ratio=5,3). No severe complications were associated with the catheters, despite a median utilization time of 7 days. Patients who underwent LRAA before IMV had a significantly shorter ICU stay (median 9 vs. 13 days, $p = 0.05$). The study also noted a trend towards longer ventilation duration in patients who received LRAA before but still required IMV. In terms of mortality, there was one death in the ICU, but no 30-day post-discharge mortality. Regarding pain chronification, only 12.5% of patients experienced this issue post-discharge.

Conclusion:

The study demonstrates the potential of LRAA in improving clinical outcomes for thoracic trauma patients in the ICU, particularly in reducing the need for IMV and shortening ICU stays. The findings suggest that early application of LRAA can be beneficial, although more research is needed to understand its full impact, especially on patients who still require IMV after LRAA.

References:

The first and second authors contributed equally to this work.