



Efficacy of Intravenous Lidocaine in Acute Trauma Patients with Multiple Rib Fractures

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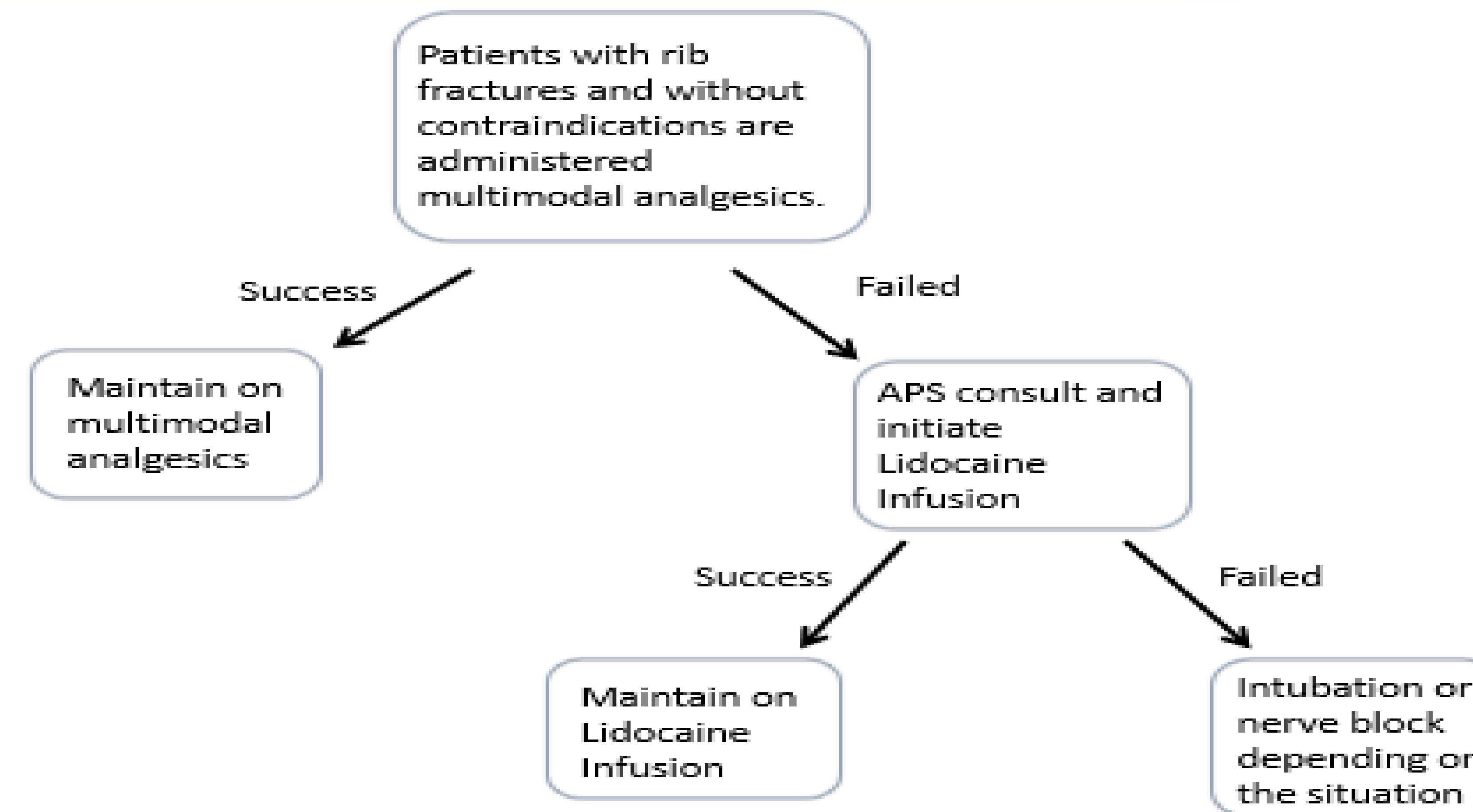
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Background

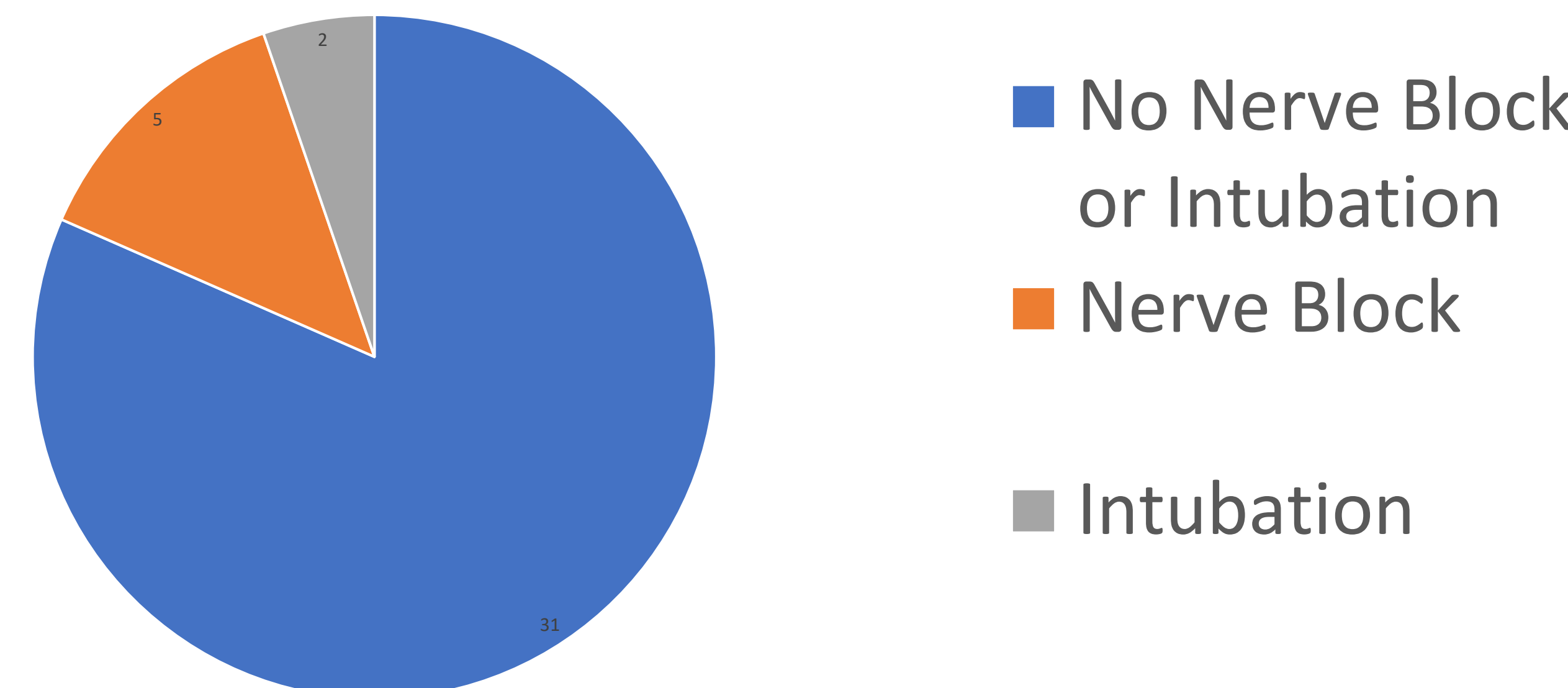
- The VCU Acute Pain Service (APS) is consulted for pain management in adult patients with traumatic rib fractures who have failed conservative therapy
 - Failure is defined by pain score and incentive spirometry volumes
- Previous studies show conflicting data regarding the efficacy of lidocaine infusions in trauma
 - some demonstrate statistically significant improvements in hospital markers, while others failed to show similar success
- We sought to determine what percentage of patients with multiple rib fractures failed IV lidocaine therapy
 - Failure was defined as requirement for a rescue nerve block and/or intubation for respiratory failure

Methods

- Retrospective chart review of patients with multiple rib fractures receiving an APS consults between 12/01/2021 and 11/30/2022 (122 patients)
- Data collectors followed a strict protocol to maintain uniformity in collection of preselected data points



Results Following Lidocaine Infusion



Results

- Of 38 patients included in our study:
 - 31 (81.6%) did NOT require rescue nerve block or intubation.
 - 5 (13.1%) required a rescue nerve block
 - 2 (5.3%) required rescue intubation.

Discussion

- Lidocaine infusions are effective in the pain management of traumatic rib fractures in adults who failed conservative multimodal analgesic management.
- IV lidocaine may decrease the need for intubation and peripheral nerve blocks
- Further studies are needed to better understand the efficacy of IV lidocaine.

References

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- Patton P, Vogt K, Priestap F, Parry N, Ball IM. Intravenous lidocaine for the management of traumatic rib fractures: A double-blind randomized controlled trial (INITIATE program of research). J Trauma Acute Care Surg. 2022 Oct 1;93(4):496-502. doi: 10.1097/TA.0000000000003562. Epub 2022 Feb 7. PMID: 35137728.