



Complications and Duration of Vasopressor Usage for Acute Traumatic Central Cord Syndrome

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Introduction

The optimal mean arterial blood pressure for spinal cord perfusion after trauma remains unclear. Though there is published data on MAP goals and SCI, the specific blood pressure management for acute traumatic central cord syndrome (ATCCS) has yet to be elucidated.

Methods

We undertook a retrospective cohort study of 38 patients with ATCCS who received any kind of vasopressors to maintain blood pressure at a level one trauma center. Data was collected on admission and discharge ASIA grades, vasopressor usage and complications, and timing of surgery.

Results

The mean age of ATCCS patients was 63 years. Dopamine was the most commonly use vasopressor (78%) followed by phenylephrine (22%). Neurologic status improved by an average of one ASIA Grade in all patients regardless of the choice of vasopressor. Timing of surgery did not impact the rate of complications. There was no clear relationship between the duration of vasopressor usage for MAP goals (mean 5 days) and extent of neurological improvement. Complications associated with vasopressor usage were notable at 75% for phenylephrine and 78% for dopamine.

Conclusions

Vasopressor usage in ATCCS is associated with complication rates that are higher than the reported literature for SCI, perhaps this is related to a relatively older patient population. As there’s not a clear relationship between duration of MAP goals and neurological recovery, prospective studies are needed to further define the need and duration of MAP goals in ATCCS.

Learning Objectives

To discuss the role of vasopressor usage for central cord syndrome

References

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