

Incomplete Cervical Spinal Cord Injury : A Case Report

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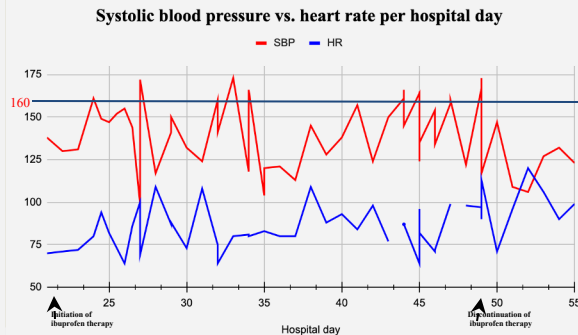
Introduction

- Autonomic dysreflexia (AD) occurs in 48-90% of spinal cord injuries (SCI) at or above T6.
- AD presents as intermittent hypertensive episodes, associated with unopposed sympathetic activity, most often triggered by noxious stimuli below the level of injury.
- Pharmacological triggers of AD have seldom been discussed in the literature.
- Nonsteroidal anti-inflammatory drugs have long been linked to worsening hypertension through mechanisms related to prostaglandin inhibition.

Case Description

- A 31-year-old male admitted to spinal cord injury unit with C7 AIS B tetraplegia.
- Scheduled high dose ibuprofen initiated several weeks into admission for ongoing shoulder pain.
- Six days into ibuprofen therapy, patient developed AD with pressures up to 173/111 and symptoms including anxiety, throbbing headache, sweating, piloerection, flushing, and dizziness.
- Thorough workup for most common etiologies was unrevealing and episodes of AD persisted.
- Ibuprofen was held due to literature association between NSAIDs and worsening hypertension.
- Within 48 hours, patient was asymptomatic and maintaining normal range pressures.

Results



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Discussion

- NSAIDs are known to contribute to new onset or worsening hypertension via blockade of COX-1 and COX-2 prostaglandins.
- NSAIDs have not been studied as a cause of AD in patients with SCI, such as those with incomplete injury of the cervical spinal cord.
- AD typically develops one month to one year after injury, normally triggered by noxious stimuli below the level of injury.
- The onset of AD and the (end of symptoms) exhibited temporal correlation with the initiation and termination of high dose ibuprofen therapy

Conclusion

- The role of ibuprofen as a potential contributing factor for persistent AD, specifically in patients with incomplete cervical spinal cord injury, warrants further investigation.

References

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