

# NASCIS2

The National Acute Spinal Cord Injury Study (NASCIS) 2 and 3 trials are often cited as evidence that high-dose methylprednisolone is an efficacious intervention in the management of acute spinal cord injury. Neither of these studies convincingly demonstrates the benefit of steroids. There are concerns about statistical analysis, randomization, and clinical endpoints. Even if the putative gains are statistically valid, the clinical benefits are questionable. Furthermore, the benefits of this intervention may not warrant the possible risks <sup>1)</sup>.

Based on a thorough reanalysis of [NASCIS2](#) data using current statistical methods, Nash et al. agree with Geisler et al. that MP should not be considered when treating ATSCI, as its use is unsupported and may invoke unanticipated harm in this high-risk target population <sup>2)</sup>.

Considerable debate has centered on the validity of results from the landmark Second National Spinal Cord Injury Study (NASCIS-II), which was published in 1990.

In NASCIS-II, 487 patients with acute TSCIs were randomized to an initial bolus of 30 mg/kg of methylprednisolone followed by an infusion of 5.4 mg/kg per h for 23 h versus either naloxone or placebo.

The primary analysis among the 487 patients enrolled within 12 h in NASCIS-II failed to demonstrate a significant neurological benefit in the 162 patients randomized to methylprednisolone. However, a secondary analysis of 65 of these patients who received methylprednisolone within 8 h of injury suggested that this subgroup experienced improved neurological recovery at 6 months.

Critics of NASCIS-II highlight the limited credibility of subgroup testing, the potential importance of losses to follow-up, the small magnitude of observed treatment effects, and the arbitrary nature of an 8-h threshold.

<sup>1)</sup>

Nesathurai S. Steroids and spinal cord injury: revisiting the NASCIS 2 and NASCIS 3 trials. *J Trauma*. 1998 Dec;45(6):1088-93. doi: 10.1097/00005373-199812000-00021. PMID: 9867054.

<sup>2)</sup>

Nash MS, Boddu JV, Green BA. Letter to the Editor. Methylprednisolone following acute traumatic spinal cord injury. *J Neurosurg Spine*. 2023 Sep 1:1-2. doi: 10.3171/2023.6.SPINE23602. Epub ahead of print. PMID: 37657094.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

<https://neurosurgerywiki.com/wiki/doku.php?id=nascis2>

Last update: **2024/06/07 02:50**

