Steroid Injections Ease Cluster Headaches

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Corticosteroid injections might ease episodic cluster headaches, according to a recent study presented at the American Academy of Neurology’s annual meeting.

Cluster headaches are a difficult-to-treat form of pain characterized by severe, throbbing pain on one side of the head. The attacks are usually bilateral and accompanied by sweating and lacrimation or by conjunctival injection, especially of the eye on the affected side.
The study subjects completed daily diaries in which they recorded cluster headache attacks, medication use, and adverse effects for 90 days. All were telephoned after 3-11 months to assess their satisfaction with treatment.

The study’s primary end point was to compare the mean number of daily attacks and, at a 45-degree angle to the left, and at a 45-degree angle to the right. Acute treatment with sumatriptan or oxygen was given as needed. Patients continued on any prophylactic agents that they were taking before the attack or were started on verapamil.

This significant benefit with active injections was the same for both episodic and chronic cluster headache patients, reported the investigators (Lancet 2011 Sept. 7 [doi:10.1016/S1474-4422(11)70186-7]). Patients given steroid injections also had fewer attacks during the first 15 days of the study compared to those receiving placebo and achieved remission a mean of 7 days earlier. Cortivazol also lowered the need for sumatriptan injections during the first 15 days of the study and reduced the need for verapamil in patients with the episodic type of cluster headache.

In addition, patients’ scores of satisfaction with therapy were higher for steroids than for placebo injections. In a post hoc analysis, 7 of 21 patients (33%) given cortivazol remained pain free from 4 days after the first injection until day 30, while only 2 of 22 control subjects (9%) did. Eleven (52%) in the cortivazol group remained pain free after the last injection to day 30, compared with only 4 (18%) in the control group.

The injections were safe and well tolerated. Adverse events – chiefly neck pain, some patients had site and headache other than cluster headache – developed in 18 (86%) of the cortivazol group and 14 (64%) of the control group.

This study received no industry funding. Dr. Leroux and her associates received research support from several industry sources, including Sanofi-Aventis, maker of the prefilled cortivazol syringes used in this study.

The study by Dr. Leroux and her colleagues provides “long-awaited evidence in support of” suboccipital steroid injections for cluster headache, said Dr. David W. Dodick. “Leroux and colleagues have provided the clinical and academic community with the largest and most robust controlled trial to date showing efficacy of suboccipital steroid injections for short-term transitional treatment of cluster headache,” he said.

The three-injection strategy used is a highly effective but cumbersome. It remains to be seen if this strategy could potentially be replaced with a single injection of steroid and local anesthetic, as has been shown in several smaller studies, he noted.

Dr. Dodick is in the department of neurology at the Mayo Clinic, Phoenix. He reported no financial conflicts of interest.

These remarks were taken from his commentary accompanying Dr. Leroux’s report (Lancet 2011 Sept. 7 [doi:10.1016/S1474-4422(11)70197-1]).