Editors' Note: Readers' correspondence this week brings out new points in 2 recently published articles. L.R. McGill and Dr. Boylan offer evidence from their own data to support the findings of Dr. Dakka et al. that noncutting needles reduce incidence and duration of post lumbar puncture headache (PLPH) compared to cutting needles. Dr. Hess wanted to know if 4-aminopyridine (4-AP) changed the duration of episodic ataxia (EA) attacks in addition to reducing their frequency, as the authors showed. Dr. Strupp, in a post hoc analysis of the raw data, showed that it did not, but discussed the possibility of dosing playing a role.

Megan Alcauskas, MD, and Robert C. Griggs, MD

HEADACHE RATE AND COST OF CARE FOLLOWING LUMBAR PUNCTURE AT A SINGLE TERTIARY CARE HOSPITAL

Leighanne R. McGill, Kevin B. Boylan, MD, Jacksonville, FL: We read the article by Dakka et al.¹ analyzing incidence of PLPH with cutting needles with interest. Our current research offers substantial evidence supporting their conclusions regarding the advantages of noncutting, atraumatic needles.

In an ongoing longitudinal biomarker study, we collected CSF by standard lumbar puncture in 20 patients with amyotrophic lateral sclerosis. We used only Quincke (cutting) needles initially but we transitioned to Whitacre2 (noncutting) needles in an effort to minimize risk of PLPH. Fifteen of 20 patients had at least 1 of 3 lumbar punctures using a Quincke or Whitacre needle, allowing direct comparison of PLPH rate with cutting vs noncutting needles in the same subjects. PLPH rate was 30% with Quincke needles and 9% with Whitacre needles for patients undergoing lumbar puncture. Hence, the rate of occurrence of PLPH with a noncutting needle was one-third the frequency of PLPH with a cutting needle. Mean duration of PLPH was 5 days for cutting needles vs 1.67 days for noncutting needles.

Our results empirically support the conclusion of Dakka et al. that routine use of noncutting lumbar

puncture needles could potentially result in fewer procedure-related adverse events and concomitant reduction in procedure-related costs.

Author Response: Y. Dakka, Detroit; N. Warra, Livonia, MI; R.J. Albadareen, Mission, KS; M. Jankowski, Detroit; B. Silver, Providence, RI: We appreciate the interest of L.R. McGill and Dr. Boylan in our study and read with interest the details of their observations. Of note, they also observed a reduced duration of headache with the noncutting needle as compared to that of the cutting needle. These findings also have implications for the indirect costs of PLPH, including days lost from work by the patient, the caregiver, or both, and additional time allocated toward headache treatment.²

Copyright © 2011 by AAN Enterprises, Inc.

1. Dakka Y, Warra N, Albadareen RJ, Jankowski M, Silver B. Headache rate and cost of care following lumbar puncture at a single tertiary care hospital. *Neurology* 2011;77: 71–74.
2. Arendt K, Demaerschalk BM, Wingerchuk DM, Camann W. Atraumatic lumbar puncture needles. *Neurologist* 2009; 15:17–20.

A RANDOMIZED TRIAL OF 4-AMINOPYRIDINE IN EA2 AND RELATED FAMILIAL EPISODIC ATAXIAS

Ellen Hess, Atlanta: “A randomized trial of 4-aminopyridine in EA2 and related familial episodic ataxias”¹ follows this group’s preliminary report on how 4-aminopyridine (4-AP) is one of few compounds that effectively blocks attacks in EA2 patients.^{1,2} The authors convincingly demonstrate that 4-AP reduces the frequency of attacks, but it would be interesting to know if it modified the severity or duration of the attacks.

A rough calculation based on the values provided for total number of attacks and duration per month suggests that although EA 2 patients experienced fewer attacks, breakthrough attacks in patients taking 4-AP lasted the same amount of time as in patients on placebo. A similar effect was previously demonstrated in the tottering mouse model of EA2 whereby

Neurology®

Headache rate and cost of care following lumbar puncture at a single tertiary care hospital

Leighanne R. McGill, Y. Dakka, Kevin B. Boylan, et al.

Neurology 2011;77:1996

DOI 10.1212/WNL.0b013e31823c15b8

This information is current as of November 28, 2011

Updated Information & Services

including high resolution figures, can be found at:
<http://n.neurology.org/content/77/22/1996.1.full>

References

This article cites 2 articles, 1 of which you can access for free at:
<http://n.neurology.org/content/77/22/1996.1.full#ref-list-1>

Permissions & Licensing

Information about reproducing this article in parts (figures, tables) or in its entirety can be found online at:
http://www.neurology.org/about/about_the_journal#permissions

Reprints

Information about ordering reprints can be found online:
<http://n.neurology.org/subscribers/advertise>

Neurology® is the official journal of the American Academy of Neurology. Published continuously since 1951, it is now a weekly with 48 issues per year. Copyright © 2011 by AAN Enterprises, Inc.. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.