Comment: Headache medicine as an emerging subspecialty—Irony and reality

In a narrative review, Begasse de Dhaem and Minen reframe headache medicine as an emerging subspecialty of neurology.¹ The authors provide a timeline spanning 2 millennia that chronicles historical, educational, scientific, diagnostic, and therapeutic developments in the field. Headache medicine as a discipline has existed for over half of a century, with organizational efforts long led by what is now known as the American Headache Society. The vast majority of headache specialists have been neurologists.

The authors note the acceleration of breakthroughs during the last decade, after a relative lull following the development of triptans. This era began with formal headache medicine fellowship credentialing, adding a level of legitimacy and visibility. Therapeutic developments have since been robust, including the approval of onabotulinumtoxinA and 2 noninvasive neurostimulation devices for migraine. The culmination of work in designer drugs for acute and preventive therapy has yielded exciting treatments including calcitonin gene-related peptide immunotherapies.

The evolution of the therapeutic landscape in headache medicine also includes clinic-based interventions such as peripheral nerve blocks. Procedural headache medicine has diversified clinical activity, helping to generate interest within neurology residency programs,² which may also attract trainees to the field. Headache medicine draws diverse expertise to the field, including concussion care, neuroimaging, neuro-ophthalmology, vascular and hospital neurology, women's health, orofacial pain, and behavioral medicine. Such clinical and scholarly collaboration adds to the interdisciplinary nature of the subspecialty.

The irony of the well-established field of headache medicine recast as an emerging subspecialty is grounded in reality: the current era has recently brought accelerating advances in organization, science, and translational and interdisciplinary therapies. Headache medicine provides an attractive, diverse career path for neurologists who are clinicians, scientists, educators, and advocates. It is of major public health importance to reduce the severe mismatch of headache specialists to the population that desperately needs them.³

1. Begasse de Dhaem O, Minen MT. Emerging subspecialties in neurology: headache medicine. *Neurology* 2017;88:e122–e125.
2. Robbins MS, Robertson CE, Ailani J, Levin M, Friedman DI, Dodick DW. Procedural headache medicine in neurology residency training: a survey of US program directors. *Headache* 2016;56:79–85.
3. Mauser ED, Rosen NL. So many migraines, so few subspecialists: analysis of the geographic location of United Council for Neurologic Subspecialties (UCNS) certified headache subspecialists compared to United States headache demographics. *Headache* 2014;54:1347–1357.

Matthew S. Robbins, MD

From Montefiore Headache Center, Department of Neurology, Albert Einstein College of Medicine, Bronx, NY.

Study funding: No targeted funding reported.

Disclosure: Dr. Robbins serves on the editorial board for *Headache* and is a section editor for *Current Pain and Headache Reports*. He has received book royalties from Wiley. He was a site principal investigator for a clinical trial by eNeura, Inc. Go to Neurology.org for full disclosures.

including training in the basic science, diagnosis, and management of primary and secondary headache disorders in adults, children, and special populations (elderly, cardiac patients, pregnancy, lactating).¹³ Fellows are prepared for the specific skills required in day-to-day headache practice, such as (1) taking a thorough headache history, (2) differentiating primary from secondary headaches, (3) recognizing the patients who need brain imaging or inpatient admission, (4) long-standing care of complex patients with problems that require both multidisciplinary management (sometimes involving psychiatry, neuro-ophthalmology, neuroradiology, and vascular neurology) and combination of medications, behavioral treatment, procedures, and lifestyle modifications, (5) performing procedures,

and (6) educating patients on lifestyle and behavioral management. The procedures performed in headache clinics include onabotulinum toxin injection, peripheral nerve block, and trigger point injection. Other options include neurostimulation and different infusions. In rare cases, patients with frequent, refractory, and severe headaches are admitted for inpatient headache care.

CAREER PROSPECTS There is a substantial shortage of headache specialists. There are no practicing headache subspecialists in 24 states.³ Overall, the number of UCNS-certified headache subspecialists does not meet the needs of the migraine population.⁴

Headache medicine is a clinical field, but there are ample opportunities for research. A survey of American Headache Society (AHS) members at academic institutions showed that 72% worked mostly as clinicians, but specialists also spent time on research and teaching.¹⁴ Some headache specialists also work for pharmacologic and device manufacturing companies.

At a time of concern about physician burnout, the future for headache medicine seems optimistic. In a survey of AHS members, 84.4% feel appreciated by their patients.⁵ Most headache specialists stated that they did not regret their decision to go into headache medicine.¹⁵

Given the headache burden on society and the shortage of specialists, headache specialists are valuable members of health care. Now is an exciting time to enter the field given the recently exponential understanding of pathophysiology and development of varied treatment options (interdisciplinary, pharmacologic, behavioral, and procedural).

AUTHOR CONTRIBUTIONS

Olivia Begasse de Dhaem: manuscript concept, design, and content. Mia T. Minen: manuscript concept, design, and content.

STUDY FUNDING

No targeted funding reported.

DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to Neurology.org for full disclosures.

REFERENCES

1. WHO. Headache Disorders [Internet]. WHO. Available at: who.int/mediacentre/factsheets/fs277/en/. Accessed October 31, 2016.
2. Evans RW. Diagnostic testing for the evaluation of headaches. *Neurol Clin* 1996;14:1–26.
3. Rizzoli P, Weizenbaum E, Loder T, Friedman D, Loder E. The evolution and geographic distribution of headache medicine fellowship programs and graduates: an observational study. *Headache* 2014;54:1591–1600.
4. Mauser ED, Rosen NL. So many migraines, so few subspecialists: analysis of the geographic location of United Council for Neurologic Subspecialties (UCNS) certified

Neurology®

Comment: Headache medicine as an emerging subspecialty—Irony and reality

Matthew S. Robbins

Neurology 2017;88:e124

DOI 10.1212/WNL.0000000000003774

This information is current as of March 27, 2017

Updated Information & Services	including high resolution figures, can be found at: http://n.neurology.org/content/88/13/e124.full
References	This article cites 3 articles, 1 of which you can access for free at: http://n.neurology.org/content/88/13/e124.full#ref-list-1
Subspecialty Collections	This article, along with others on similar topics, appears in the following collection(s): All Headache http://n.neurology.org/cgi/collection/all_headache History of Neurology http://n.neurology.org/cgi/collection/history_of_neurology Other Education http://n.neurology.org/cgi/collection/other_education
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 © 2017 American Academy of Neurology. All rights reserved. Print ISSN: 0028-3878. Online ISSN: 1526-632X.