## **Vox Clamantis**

## The Adaptation of Management of Chronic Migraine Patients With Medication Overuse to the Suspension of Treatment **Protocols During the COVID-19 Pandemic: Lessons From** a Tertiary Headache Center in Milan, Italy

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Due to restrictions put in place to control the spread of COVID-19 in our city, clinical activities at our tertiary headache center in Milan (Foundation IRCSS Carlo Besta Neurological Institute) have been dramatically curtailed in the past 4 weeks. Patients have been restricted from coming in for regular visits and in-person treatment protocols were suspended. Treatment efforts were modified as much possible to make use of telephone and internet communication options.

However, we were concerned that patients enrolled in our chronic migraine medication overuse day hospital program would be most severely affected. Typically, such patients would be seen clinically every 3 months for a period of 1 year and treated with both pharmacological and behavioral therapies designed to, first, withdraw overused medication(s) and then, reduce the risk of relapse.<sup>1</sup> Behavioral treatments, including

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mindfulness practice, were offered at regularly scheduled, in-person, weekly sessions at the hospital. Due to the restrictions, patients missed both the clinical and behavioral sessions.

To remedy this problem we devised, and implemented, a new specific protocol to allow us to follow these patients effectively during the emergency, to check their clinical symptoms and to avoid relapses of medication overuse after withdrawal. After written consent, we enrolled a group of 20 patients, following medication withdrawal, who were on a waiting-list to start weekly mindfulness training sessions to support continued withdrawal and pharmacological prophylaxis. Clinical status, frequency and intensity of headache episodes, and use of analgesics, are monitored online or by telephone weekly. This includes an evaluation of the diary, by examining pain episodes of the week, medication intake, disability concerning family, and work activity; how patients managed their pain; if patients followed the prophylaxis correctly.

In addition, regular daily 12-minute sessions of mindfulness were added through use of a smartphone application and conducted by a physician with expertise in this field. During the sessions patients are

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invited to keep their eyes closed, to pay attention on the breathing and to focus on that specific moment in a "non judgmental moment-to-moment awareness."

It is still early and the pandemic continues, however, patients seemed to have embraced this treatment modality: the sessions are regularly attended along with follow-up video calls for analysis of the headache diary, medication use, support during this stressful time, and discussion of further management including mindfulness practice, relaxation with short body scan, physical activity with home with specific short sessions, dietary habits, and sleep rhythm.

Clinical improvement appears to be significant. The most striking finding at this point is the high level of acceptance among patients for this treatment adaptation and of its apparent safety. We may be seeing the first step in a coming revolution in the delivery of health care this pandemic may have forced us to develop and model revolutionary treatment modalities.

In the last decade several reports have documented how telemedicine with smartphone applications can be used effectively for patients with chronic pain.<sup>2</sup>

These strategies have now been incorporated into multidisciplinary approaches to achieve optimal outcomes in the management of chronic pain. It has been noted that these smartphone applications can support and engage patients in between traditional outpatient visits and encourage them to play a more proactive role in the management of their pain.<sup>2</sup>

In particular these self-management applications, along with sessions for mindfulness, show improvement in a patient's ability to practice nontraditional pain-control methods on their own without additional management or prescription medications, something very valuable during limitations caused by the current pandemic.

Others<sup>3</sup> though have reported inconclusive and poor-quality results with the use of telemedicine and thus further exploration and follow-up is needed. However, during this current crisis, our experience has been of dramatic benefit of these telemedicine techniques to protect both patient and provider while continuing, and possibly enhancing, the care of our patients.

## **REFERENCES**

- Grazzi L, Raggi A, D'Amico D, et al. A prospective pilot study of the effect on catecholamines of mindfulness training vs pharmacological prophylaxis in patients with chronic migraine and medication overuse headache. *Cephalalgia*. 2019;39:655-664.
- Alexander J, Joshi GP. Smartphone applications for chronic pain management: A critical appraisal. *J Pain* Res. 2016;9:731-734.
- 3. Adams C, Deeker-Van Weering MGH, Van Etten-Jamaludin FS, Stuiver M. The effectiveness of exercise-based telemedicine on pain, physical activity and quality of life in the treatment of chronic pain: A systematic review. *J Telemed Telecare*. 2018;24:511-526.