INSTRUMENTS TO IMPROVE DIAGNOSIS AND MIGRAINE TREATMENT OUTCOME

Sofia Gak

I. M. Sechenov First Moscow State Medical University

Migraine is a highly prevalent and disabling illness that remains substantially undiagnosed in primary care. Migraine is not life threatening, but it can destroy the quality of patient's life. There are three basic parts of effective Migraine and headache management:

- 1. Trigger identification and management.
- 2. Preventing as many Migraines and headaches as possible.
- 3. Aborting Migraine attacks as quickly and effectively as possible.

One of the most helpful tools when trying to achieve the best level of care for migraines and headaches is a Headache and Migraine Diary that can be used in making diagnosis and treatment as well. Charting the specifics of patient's headache episodes will help health care provider determine what type of headache patient is experiencing and how best to treat them.

Migraine Diary will be useful to track triggers. Because migraine is a disease that is not fully understood, and therefore not easy to treat or cure, much of the focus of treatment has been trying to stop the migraine chain-reaction before it starts. The migraine trigger is internal and external factors that start the chain reaction, in people who are already predisposed to migraine. Trigger identification and management is an integral part of Migraine management, because one of the best ways to manage Migraines without taking medication is to identify and avoid Migraine triggers. Some triggers can be avoidable. Other triggers can't be avoided, but knowing about those triggers is still helpful in patients' efforts to have fewer Migraines. Another consideration is that triggers can

be "stackable" or "cumulative." This means that some triggers might not bring on a Migraine if we counter just one, but "stack" two or more together, and they bring on a Migraine. There are countless potential trigger factors and they differ for everybody, so ask your patients to pay close attention to lifestyle, environmental and dietary factors in the 48 hours preceding the attack. Some of the most common triggers include: Lack of food, missed meals, delayed meals, specific foods (commonly cheese, coffee, citrus foods, fizzy drinks to name a few), onset of menstruation, noise, strong smells, stress, anxiety, lack of/ too much sleep, excess exercise, travel, excitement, bad news, light, weather, fatigue, alcohol. And it is important to realize that what triggers a Migraine for one person, may not trigger one in another.

• Migraine Diary will be useful to recognize premonitory symptoms (also known as prodrome). They can arrive right before the major part of the attack, or even a day or earlier. They may include fatigue; muscle stiffness, especially in the neck, back and face; changes in bowel habits; food cravings; depression or irritability; difficulty concentrating; feeling cold; and sensitivity to light or sound. Premonitory symptoms are considered the first phase of a migraine headache, followed by aura, headache, and the postdrome. What's the use of noticing these symptoms? First, it may help to correctly recognize triggers, if patient know when the migraine chain-of-events started. Second, it often helps to take medication earlier in the attack, because treatment of migraine is most effective if given at the start of an attack. The premonitory phase may be too early, but it will put patients on the alert.

• The diary also monitors the success or failure of treatments and the effectiveness of medications. Have the attacks become less frequent since you started taking a certain medicine? Are they less severe? Are there side effects? The Diary helps patients see any changes in their migraines - changes that could be so gradual patient wouldn't notice them without a written record. So, a doctor can find the most effective treatment for patient.

There are also some various diary options:

• The first diary format is the basic "daily diary".

For those of patients who have pretty complicated days of multiple symptoms, multiple medications, etc., the daily format may work well.

• The monthly format works well if patient is down to only a few Migraines or headaches a month. It's also a good summary diary. Patient can take his/her primary diary and summarize it on a monthly format. This may be very helpful if a doctor wants some details, but not as many as patient want to record for him/herself.

There are countless types of headache diaries: from simple written headache diary to electronic headache diary in a mobile phone. The main idea is to find convenient way to record all the information. Patients can use a notebook, a calendar, or create a computer file where he/she can easily keep track of all the information. It is important to use it as soon after headache as possible. That way, all the details will be fresh in memory, and patient will be sure to get them all down in the Diary.

The use of the new information technologies and the web can provide useful support for the patient's headache management, from the first consultation to the subsequent follow-up stages, favouring easy communication between the patient and the physician. The headache diaries provide specialists with additional information to complement the clinical interview and improve the diagnostic process. Besides, the diaries reveal the frequency of headaches and their periodicity (such as weekend headache, menstrual related migraine, headache during sleep) and allow an evaluation of drug consumption.

The HALT and HART indices.

Assessment of a headache disorder as a prelude to planning best management requires more than diagnosis: there should be some measure or estimation of the impact of the disorder on the patient's life and lifestyle. There are many ways in which recurrent or persistent headache can damage life. Finding

a simple measure that summarizes these in a single index, and which is equally applicable for all of the common headache disorders, is quite a challenge. The MIDAS instrument developed by Stewart and Lipton has proved extremely useful. The concept behind it is simple enough: it estimates active time lost through the disabling effect of headache, and the result is expressed by a number with intuitively meaningful units (hours). The HALT index is a direct and close derivative of MIDAS. It was developed by Lifting The Burden to use wording that is more easily translated. Whenever treatment is started, or changed, followup ensures that optimum treatment has been established or recognizes that it has not and identifies any further change to treatment that may be needed. It is not always easy to know whether or not the outcome that has been achieved by an individual patient is the best that the patient can reasonably expect. For the non-specialist, one question that sometimes arises is: "What further effort, in hope of a better outcome, is justified?" A second question, which follows if it is thought that more should be done, may be "What is it that needs changing?" An international working group of Lifting The Burden is developing the Headache Under-Response to Treatment (HURT) index, an outcome measure that is designed to aid management by suggesting answers to these two questions. The instrument that is included here is its forerunner, pending validation. To distinguish between them, it is referred to as the Headache and Assessment of Response to Treatment (HART) index.

HALT Index (Headache-Attributed Lost Time)

HALT Index will help doctor or nurse understand how much patient's headaches are affecting his/her life, and guide patient's medical treatment.

So, HALT Index is intended for pre-treatment assessment of illness severity.

HART Index (Headache and Assessment of Response to Treatment)

Patient's medical treatment for his/her headaches may not be as good as it can be. By completing this short questionnaire, patient will help his/her doctor or nurse to improve it.

So, HART Index is an outcome measure, which is a guide to follow-up and need for treatment review Ticks towards the right suggest increasing need for treatment review.

In conclusion, migraine remains a substantially under-diagnosed and under- treated condition.

Tools to diagnose migraine and to measure head-ache-related disability can help to address barriers to effective diagnosis and treatment.