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Multidisciplinary approach to patients with chronic migraine and medication overuse: experience at the Besta Headache Center

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Abstract The question concerning treatment of chronic forms of migraine associated with medication overuse has been largely debated and discussed in the last years and clinical experience has indicated the withdrawal as the first step to treat these patients as the withdrawal is useful so that a preventive pharmacologic therapy can be effective. Moreover, in the last 15 years it has been realized that chronic migraine with medication overuse is clearly a biobehavioral disorder. This clinical condition is not only a painful condition residing in an abnormality of receptor physiology; it is more aptly recognized as a condition wherein emotion and pain are intermingled. For this reason a multidisciplinary strategy of treatment which considers every aspect of individual life, social and emotional, is needed.

Keywords Chronic · Migraine · Medication overuse · Multidisciplinary approach

Introduction

The question concerning treatment of chronic forms of migraine associated with medication overuse has been largely debated and discussed in the last years [1].

Recently, one of the most accepted theory elaborated on this problematic form of headache is that it is a clinical entity with different clinical and ethio-pathological factors and that all of these factors have to be evaluated when we consider the important point of the therapeutic approaches [2].

In fact, we realized that a singular and isolated pharmacological traditional therapy is not enough to manage these kinds of patients and that the treatment has to be included in a therapeutic strategy including different approaches, pharmacological and non-pharmacological [3].

Chronic forms of headache so disabling are costly to the patients and society if we evaluated the absenteeism, reduced productivity and the burden of health services.

Management of these patients is difficult and only few controlled treatment studies have been performed [4].

In the last 15 years, clinical experience has indicated the withdrawal as the first step to treat these patients: in fact the withdrawal from overused medications is useful so that a preventive pharmacologic therapy can be effective [2–5].

The withdrawal is an important opportunity for patients to be educated to the correct use of symptomatic medications, and to start to evaluate their headache history carefully, pharmacological treatments and the rhythm of their life, the bad habits which can favor an increase of headache attacks. Patients have to be trained to manage pharmacological therapies, in particular symptomatic medications, by avoiding to be overusers as they have to understand how the excessive use of symptomatic medications can induce a significant increase of pain attacks, and the clinical situation starts to be chronic. This is the first step for chronic patients to manage their headache, but patients have to be supported and encouraged through this direction, and physicians and psychologists have to spend time to explain to patients what they are doing and why they have to change their habits [2–6].

Every step of the therapeutic program has to be explained adequately, so patients can become more responsible of their treatment process, they have to

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recognize how to manage pain attacks or possible adverse events from therapies and the objective of therapeutic program [6].

Continuing to work with these difficult patients has given us new insights into their dynamics and needs.

We and others have come to realize that chronic migraine with medication overuse is clearly a biobehavioral disorder. As Saper et al. [6] and Lake [7] have articulated so well, this clinical condition is not only a painful condition residing in abnormality of receptor physiology; it is more aptly recognized as a condition wherein emotion and pain are intermingled.

Clinical experiences at the Besta Institute

The therapeutic program that we assessed at the Neurological Institute Besta is a multidisciplinary treatment for the management of patients pain and overuse through withdrawal, conducted by different modalities (in-patients or day-hospital or out patients program), pharmacological therapy for prophylaxis, preventive therapy for anxiety or depression when present (in these kind of patients comorbid conditions as depression or anxiety are often revealed) then behavioral therapies, physical therapy, psychotherapy [8, 9].

All patients are provided with a comprehensive diagnostic evaluation including physical examination, psychological tests and then, during the course of the withdrawal, patients are free to contact and to discuss with physicians about their program and also about the adjustment of their habits: sleep-rhythm, diet, physical activity, problematic situations at the work place and so on.

Moreover, most important, patients are educated through a careful observation and explanation, to learn the correct use of analgesics so that they can avoid the onset of overuse after withdrawal.

The multidisciplinary chronic migraine management program is provided over 2 weeks for withdrawal treatment and then over 3–6 months for psychotherapy and for learning how to manage pain and increase patients' functioning, to enable them to return to gainful employment as well as to return to a higher level of recreational and social activity [8–10].

Psychological treatment is encouraged in our chronic pain program to treat psychological, emotional, social and personality factors which can interfere with patients' ability to cope with pain. In addition, the behavioral medicine program addresses any patient's tendency toward unrealistic expectations concerning the medical profession [11, 12]. Frequently, expectations of patients derived from the withdrawal and the medical approach are not realistic, and the hope of a complete recovery from the pain condition is frequently related to the expectations of patients instead of realistic objective of the therapies. Patients, by the behavioral intervention, can learn to manage their pain, to use technique as consciousness meditation or relaxation, which modify their propensity to use analgesics so that they can be more conscious about their pain and how to cope with it [13, 14].

Psychological and behavioral interventions also assess any tendency toward symptom exaggeration, or secondary gain associated to pain, that may lead to unconscious resistance to treatments [14].

Physical activity when an individual experiences pain, the natural protective response is to stop any physical activity for fear that this activity can induce more pain. It is an instinctual reaction that patients realize to defend themselves from the risk of increased pain. Patients become sedentary and avoid physical exercise and this lack of movement leads to muscle guarding, to a decrease of beta endorphin production, to a more muscle stiffness and consequently to an increase of pain and use of medications for aborting pain.

The role of physical activity is to help patients regain use of their muscle in the body to improve tolerance to pain. After patients began to regain mobility, they are also provided to adjust an active life style and they are offered training concerning a self-directed fitness program and need for an ongoing lifestyle including necessary exercise, proper nutrition, and to remain in a healthy weight.

Sometimes patients are unable to progress toward all the activities of the program in a limited period of time of few weeks as they need more time and the program has to proceed more gradually.

Patients who approach the withdrawal program conducted at the Besta institute are given a specific information by a short guide where the program is illustrated in detail in simple language, as we have to be sure that patients can understand correctly the information we give about the therapy. Also some common questions about the program and about what they are going to do are answered so patients can discuss with their physicians about any aspect of the therapy. Finally, apart from a psychological intervention, the management and the use of meditation, in particular consciousness meditation, is largely encouraged as it is helping to modify deeply lifestyle, bad habits and bad thinking [7].

Summary

Patients who need to be submitted to a therapeutic program for chronic migraine with medication overuse have to be carefully managed by a multidisciplinary program including withdrawal, as the first step of therapy, interruption of

medications intake, followed by pharmacological prophylaxis for migraine, treatment for anxiety and depression if needed, and psychological training for supporting and educating them to manage their pain; finally physical therapy and adjustment of their life habits which can produce discomfort and pain have to be carefully considered.

Conflict of interest I certify that there is no actual or potential conflict of interest in relation to this article.

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