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Upper gastrointestinal bleeding related to migraine: the importance of education for migraine care

Received: 11 June 2003
Accepted in revised form: 14 January 2004

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Abstract Physicians involved in care of migraine patients should make a considerable effort to educate themselves and their patients. It is fundamental that doctors, patients and their families understand the causes of migraine, and know the different treatment strategies available to improve migraine care. Mallory-Weiss tears are lacerations in the region of the cardioesophageal junction due to vomiting. We report a case of Mallory-Weiss tear secondary to migraine

that could have been reasonably avoided had the patient been treated with triptans since the first attack, according to the stratified care strategy. This case illustrates that inadequate management can cause serious medical consequences. It also proves that it is necessary to improve education about migraine for both patients and doctors.

Key words Migraine · Mallory-Weiss tear · Education

Introduction

Migraine is a disabling condition with high prevalence and economic cost [1]. In the last years, major scientific advances have been achieved in uncovering the pathophysiology of migraine and new therapies have been developed [2]. Doctors treating migraine patients should make a considerable effort to be familiar with new treatment strategies. In addition, it is important that patients with migraine and their families understand the cause of migraine, know the side effects of the drugs prescribed, and have clear information about the goals of the treatment. Physicians should identify, preferably at the first consultation, successful therapies for each patient. The development of strategies for optimizing acute migraine treatment can help doctors in their decisions. Currently there are two main therapeutical approaches for migraine attack management: step care and

stratified care [3]. In stratified care, treatment selection is based on the severity and disability due to migraine attacks. We report a case of Mallory-Weiss tear secondary to migraine that could have been avoided with an adequate therapeutic approach, and we illustrate the need for continuous education in migraine for both doctors and patients.

Case report

A 25-year-old man was brought to the emergency room with acute hematemesis after vomiting during a migraine attack. He had been diagnosed with migraine without aura 5 years previously according to established criteria [4]. There was no relevant medical history. The migraine attacks occurred three or four times per year, lasted 6–12 hours, and were moderate, with vomiting; the patient was not taking any analgesics. In

the last year, the headaches became more frequent (up to two per month), severe, disabling and lasting about 24 hours. Migraine attacks decreased the patient's ability to function and caused on average one day of lost work per month. Acetaminophen (1000 mg) helped slightly. The patient visited his primary care physician who recommended aspirin (1000 mg) alone or together with metoclopramide, which resulted in little or no relief in two previous attacks.

On the day of admission, the patient had developed a migraine attack, and took aspirin (1000 mg) without benefit. He began vomiting blood and was taken to hospital. Endoscopy was performed and showed a 1.5-cm laceration in the mucosa of the gastroesophageal junction (a Mallory-Weiss tear) and erosive gastritis. The hemorrhage ceased spontaneously, and the patient needed five days of hospitalization and two weeks of rest at home.

The abortive migraine therapy chosen by the patient for subsequent migraine attacks was sumatriptan (subcutaneous or oral), with quick and effective relief of posterior attacks.

Discussion

Mallory-Weiss tears are lacerations in the region of the cardioesophageal junction secondary to an abrupt rise in abdominal pressure due to nausea, vomiting or vigorous coughing [5]. Migraine, as in this case, is a rare condition associated with this syndrome. Aspirin consumption does not cause Mallory-Weiss syndrome, but can result in esophagus injury, predisposing to mucosal tears, and increase the risk of bleeding because of its platelet antiaggregating effect [6].

Patients with migraine should receive quick and effective relief of their pain and disability. In the primary care setting, stratified care is the best and probably most cost-effective method of migraine management compared with step care [3, 7]. The physician should decide in the first visit if a patient may benefit from triptans by assessing the intensity and disability of the attacks. The Migraine disability assessment (MIDAS) questionnaire can help physicians choose the best treatment at the first visit [8]. This scale is the best studied tool to assess migraine disability. Aspirin and non-steroidal anti-inflammatory drugs (plus metoclopramide) constitute an excellent group of medications for the acute treatment of migraine, but triptans are better when the attacks are severe and disabling [9].

Physicians and patients should work together to develop a treatment program. It is important that patients understand the goals of the treatment program and establish a fluid communication with their doctors, mainly to evaluate the effectiveness of the therapy. In this case, the communication failed because the patient should have gone back to his family doctor to report the ineffectiveness of aspirin.

Mallory-Weiss tear is a rare migraine-related complication that could have been reasonably avoided had the patient been treated with triptans since the first attack, according to the stratified care strategy. This case illustrates that an adequate education about migraine for both doctors and patients is essential to optimize migraine care. Doctors will be able to select better treatments for their patients, and patients will benefit from doctors' decisions, improving their quality of life and satisfaction with care, reducing their disability, and preventing the associated complications.

References

1. Hu HJ, Markson LE, Lipton RB, Stewart WF, Berger ML (1999) Burden of migraine in the United States. Disability and economic costs. *Arch Intern Med* 159:813–818
2. Goadsby PJ, Lipton RB, Ferrari MD (2002) Migraine - current understanding and treatment. *N Engl J Med* 346:257–270
3. Tepper SJ, Rapoport AM, Sheftell F (2002) Strategies of care for acute treatment of migraine. *J Headache Pain* 3:63–69
4. – (1988) Classification and diagnostic criteria for headache disorders, cranial neuralgias and facial pain. Headache Classification Committee of the International Headache Society. *Cephalalgia* 8[Suppl 7]:1–96
5. Watts HD, Admirand WH (1974) Mallory-Weiss syndrome, a reappraisal. *JAMA* 230:1674–1675
6. Kortas DY, Haas LS, Simpson WG, Nickl NJ, Gates LK (2001) Mallory-Weiss tear: predisposing factors and predictors of a complicated course. *Am J Gastroenterol* 96:2863–2865
7. Lipton RB, Stewart WF, Stone AM, Lainez MJA, Sawyer JPC, Disability in Strategies of Care Study Group (2000) Stratified care vs step care strategies for migraine: the Disability in Strategies of Care (DISC) study: a randomized trial. *JAMA* 284:2599–2605
8. Lipton RB, Silberstein SD (2001) The role of headache-related disability in migraine management: implications for headache treatment guidelines. *Neurology* 56[Suppl 1]:S35–S42
9. Silberstein SD (2000) Practice parameter: evidence-based guidelines for migraine headache (an evidence-based review): report of the Quality Standards Subcommittee of the American Academy of Neurology. *Neurology* 55:754–763