

Brief Communication

Triptans Versus Analgesics

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Objective.-To retrospectively assess patient preferences between triptans and analgesics in treating migraine headache.

Methods.- The study assessed patient preferences for triptans versus commonly used migraine analgesic preparations. Over a 3-month period, 663 patients with migraine between the ages of 17 and 62 years completed an office-based survey.

Results.-Most patients preferred a treatment regimen that included either a triptan alone (52%) or a triptan with an analgesic medication within 1 hour (18%). Overall, 70% of patients who had been given triptans in the past chose to continue to use them, either alone or with an analgesic. Patients who preferred analgesics alone comprised 21 % of the total. Nine percent preferred not to take either triptans or analgesic medications. Among the patients who preferred triptans, 62% stated that increased efficacy was the primary reason for their preference. Thirty percent cited both efficacy and decreased adverse events. The remaining 8% believed that decreased adverse events was the basis for their preference.

Conclusions.-Despite cost and other limitations of triptans, most patients prefer them over nontriptan medications. Enhanced efficacy was the main reason for choosing triptans over analgesics.

Key words: triptan, analgesic, migraine

Abbreviations: OTC, over the counter

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Patients have a wide selection of abortive migraine medications available. Most patients medicate, or over-medicate, with over the counter (OTC) preparations. Commonly used OTC medications include acetaminophen, aspirin, aspirin with caffeine combinations, ibuprofen, and naproxen. Migraine sufferers often rely on prescription analgesics, such as butalbital preparations or narcotics. Many patients use two or more abortive medications, choosing each depending on the type and severity of headache. OTC medications often produce gastrointestinal side effects, whereas prescription analgesics may produce sedation and addiction.

The triptan class of migraine abortives, including sumatriptan, rizatriptan, naratriptan, zolmitriptan, and

almotriptan, has revolutionized migraine management. The completeness of headache relief is unique to this class. Patients do not feel drugged, because of minimal sedation, and are often able to function normally after using a triptan. Drawbacks of the triptans are cost and cardiac side effects, although serious adverse events have been rare.

This study was designed to retrospectively assess patient preferences, in a large sample of migraineurs for triptans versus analgesics, whether OTC or prescription medications.

METHODS

Study Site.-The study was completed in the offices of the Robbins Headache Clinic.

Patient Sample.-Patients were included in this study if they had a diagnosis of migraine (1.1 to 1.7 of the International Headache Society classification system²) or transformed migraine. The diagnosis of migraine or transformed migraine was made by the headache specialist at the Robbins Headache Clinic.

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Although the diagnosis of migraine was based on International Headache Society criteria, the transformed migraine diagnosis was based on criteria proposed by Silberstein et al.^{3,4} Because these patients were seen by a headache clinic, as a whole they may have been more refractory than those seen in primary care. Although many patients in this study had failed OTC medications, a large number of them had used virtually no migraine medications before being seen at the clinic. Many (but not all) subjects had used analgesics for months or years before using triptans.

Over a 3-month period, every patient seen in the clinic with a migraine or transformed migraine diagnosis was invited to participate in the study. Only 36 patients declined to participate. All patients who had used triptans at any time in the past for at least 1 migraine were asked to participate. Almost all patients had used a triptan for at least 3 migraines. A total of 663 male and female patients between the ages of 17 and 62 was enrolled over the 3 months. All patients provided written informed consent for study participation.

Design. This was a case series study, designed to assess patient preferences between triptans and commonly used migraine analgesic preparations.

Instruments. During scheduled office visits. Patients were asked to complete a survey on their preference for treatment of migraine (Table 1). Specifically, the first question asked about medication preferences, either triptans (ie, sumatriptan [ImitrexTM], rizatriptan [MaxaltTM], zolmitriptan [ZomigTM], or naratriptan [AmergeTM]) or pain medications, including OTC preparations (nonsteroidal anti-inflammatory drugs, aspirin and caffeine combinations, acetaminophen, acetaminophen plus caffeine, a combination of aspirin, acetaminophen, and caffeine, etc.) and prescription analgesics. These included various narcotic or butalbital medications, with or without aspirin or acetaminophen. Only tablets or nasal sprays were considered. The second question was designed to ascertain the basis for the preference. Responses included concerns regarding side effects and efficacy of treatment. Patients also were permitted to write in an alternate explanation, if the reason for their preference was not listed (Table 1).

Statistical Analysis. Patient preferences for triptans were analyzed by making comparisons. All comparisons were tested for significant deviation from a theoretical 50:50 distribution that would occur if patients

Table I.-Patient Preference Survey

- A. For your migraine headaches, in the past you have used one of the following triptans: ImitrexTM (tablets or nasal spray only), MaxaltTM, ZomigTM, or AmergeTM.
- B. You have also used analgesics, including over the counter medications that include acetaminophen, aspirin, ibuprofen, naproxen, ketoprofen, or combinations of these with caffeine. Examples include Excedrin Extra StrengthTM, Excedrin MigraineTM, AnacinTM, VanquishTM, AdvilTM, MotrinTM, AleveTM, and various headache powders (such as Goody's).
- The prescription analgesics would include any of the following: tablets or nasal sprays (not injections) of narcotics, such as hydrocodone (VicodinTM, LorcetTM, LortabTM, ZydoneTM, or NorcoTM), codeine (Tylenol with CodeineTM), dihydrocodeine compounds (SynalgosTM, Pan lor SSTTM), propoxyphene (Darvocet n-100TM or DarvonTM), Stadol Nasal SprayTM, meperidine (DemerolTM), oxycodone (PercocetTM), morphine tablets, or any other similar narcotic preparations.
- The prescription analgesics also comprise medications that include butalbital, including the generic preparations plus the following: FiorinalTM, FioricetTM, EsgicTM or Esgic PIUSTM, PhrenilinTM, Fiorinal with CodeineTM, and Fioricet with CodeineTM.

Question 1: Which of the above do you prefer for your migraine headache? (circle one)

- A. Triptans
 B. One of the other medications described in B above.
 C. Both of the above within 1 hour of each other (in either order, or both at the same time)
 D. Neither triptans nor the other medications in B.

Question 2: Why? (circle one)

1. Side effects are less
 2. Works better, more effective
 3. Both of the above
 4. None of the above (please write in why you did prefer one over the other if you answered "none of the above")

were randomly assigned to either category. This was done using the binomial test.

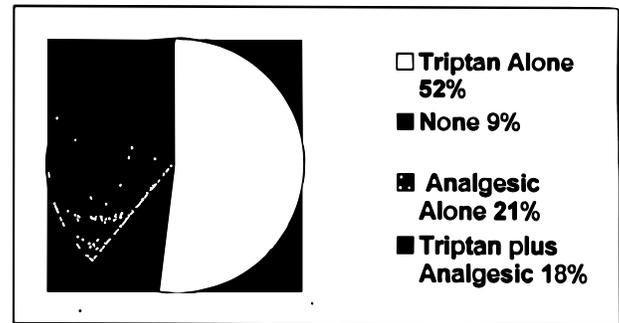
Patients who preferred either triptans alone or analgesics alone were asked why they preferred the medication they did. These preference reasons were analyzed by comparing patient responses in the triptans alone (n = 344) with the responses in the other medication group alone (n = 140) using the chi-square test.

RESULTS

Patient Preferences for Triptans.- The proportion of patients preferring triptans (either alone or in combination with other medications; Figure) was compared with the proportion of patients not preferring triptans in any form. The binomial test was used to analyze the results. Of the total 663 patients, 465 (70.1 %) preferred triptan over nontriptan therapy. This comparison was highly significant ($P < .0001$).

Only a slightly higher proportion of patients preferred triptans alone (344/663 = 51.9%) than preferred any other combination (319/663 = 48.1 %), which included triptans in combination with other pain medications. This distribution was not significant ($P = .3316$). Of the patients who did prefer triptans, 344 of 484 (71.1 %) preferred to use the triptans alone (versus in combination with analgesics).

Reasons for Patient Preference.-Patients who preferred either triptans alone or some other pain medication alone were asked to explain their preference. (Table 2). These preference reasons were analyzed by comparing patient responses in the triptans alone group (n = 344) with the responses in the other medication alone group (n = 140) using the chi-square test. The distribution of patient preference reasons was significantly different between the 2 groups ($P < .0001$). The adverse events profile appeared to play less of a role in patient preferences than efficacy, and this trend seemed more pronounced in the triptans alone group than in the other medication alone group. For example, only 8.1 % (28/344) of the triptans alone patients and 9.3% (13/140) of the other medication alone group responded that fewer adverse events was the primary reason for their medication preference. Further, 29.9% (103/344) and 40.0% (56/140) of these 2 respective group responded that *both* adverse



Drug preference in migraineurs.

events and efficacy played a role in their choice. However, almost two-thirds, 61.9% (213/344), of the triptans alone patients based their choice entirely on efficacy versus only 45.7% (64/140) of the other medication alone patients.

COMMENTS

Physicians and patients are faced with a bewildering array of migraine abortive medications. This current study demonstrates that in a large number of patients who had been given triptans in the past, 70% chose to continue using them, either alone or with analgesics. Efficacy was the primary reason for choosing triptans over analgesics.

A number of studies have demonstrated the efficacy of triptans for the treatment of migraine.⁷ In addition, controlled studies of various analgesics show that these are also useful for migraineurs. However, even though 2 therapies may have similar efficacy in separate trials, patients may overwhelmingly prefer one to the other in a "real life" preference study, such as the current one. With triptans, it may be that both the completeness and quality of relief contribute to patient preference. Most patients simply feel better with more complete relief and less side effects with triptans than with the other currently available medications.⁹

A previous preference study assessed 648 patients who had received subcutaneous sumatriptan. The sumatriptan was rated more favorably than aspirin, acetaminophen, or the patients' usual therapies with respect to the attributes of how well it works, how fast it works, and the number of doses needed to

Table 2.-Reason for Medication Preference

	Triptan Alone	Other Medication Alone
Fewer adverse events Works better	28(8.1%) 213 (61.9%)	13 (9.3%) 64 (45.7%)
Both fewer adverse events and works better	103 (29.9%)	0
Neither	344 (100.0%)	56 (40.0%) 7 (5%)
Total		140 (100.0%)

relieve pain. The sumatriptan also rated more favorably than either aspirin or the patients' usual therapies with respect to adverse events. More patients chose to continue with subcutaneous sumatriptan than with any other single medication!

In a large prospective study, 749 patients were recruited by 72 centers to assess sumatriptan versus their customary therapy. Sumatriptan was considered by most patients (67% to 85%) to be fast acting and dependable, with a long duration of effect, allowing them to return to their usual activities. By comparison, only 15% to 32% of patients stated their customary therapy possessed the same attributes. However, for ease of use, the customary therapy was rated much higher than sumatriptan. Eighty-nine percent of patients indicated they would use the sumatriptan again in the future.¹⁽⁾

A number of studies evaluated the impact of triptans on quality of life, workplace productivity, and nonwork activities. One large study concluded that sumatriptan greatly reduced migraine-related use of outpatient services and emergency department visits. Sumatriptan usage resulted in significant and sustained improvements in health-related quality of life scores. The patients reported much less work time being lost. Other studies also demonstrated an improved quality of life."⁴

In a study similar to ours, 73% of patients preferred sumatriptan tablets to their usual lioetriptan prescription or OTC therapy. Eighteen percent preferred their usual therapy, and 9% had no preference. This was an open label, multicenter, observational study completed by

402 patients.¹⁵ Another open label study concluded that 69% of patients preferred sumatriptan to their previous nontriptan therapy, 18% preferred their previous therapy, and 14% reported no preference. In this study, triptan therapy decreased office visits, emergency room visits, and hospitalizations.¹⁶ These results are very similar to those of our current study.

In conclusion, despite the limitations (primarily cost) of triptans, most patients prefer them to non-triptan medications.

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