

admirable in a population at significantly higher-than-average risk for future fracture.<sup>1</sup> Our previously reported educational effort directed at health care providers and patients achieved a 30% treatment rate at 1 year after low-impact fractures requiring hospitalization.<sup>2</sup> This prompted the current survey.

We agree this is a complex problem, and although an initial barrier may be clarifying the role of responsibility, clearly additional barriers exist beyond identifying the responsible party and educating health care providers. Patient reluctance reported by Dr Cuddihy et al, however, is somewhat contrary to our experience—that most patients who began treatment with calcium, vitamin D, and/or specific osteoporosis medication at the time of their acute fracture remained compliant with medication at 1 year.<sup>2</sup>

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### Strategies in the Treatment of Migraine

*To the Editor:* The article on the diagnosis and treatment of migraine by Drs Cady and Dodick<sup>1</sup> was interesting, and we offer the following comments. The authors discussed the step care, staged care, and stratified care models of management but failed to include 2 recent important studies<sup>2,3</sup> that showed that a stratified care strategy is highly cost-effective with improved clinical outcomes in the primary care setting compared with the step care approach.

In the treatment section of their review, Cady and Dodick state that antiemetics may be effective only when migraines are associated with severe nausea. In clinical practice, nausea is observed in up to 90% of migraineurs. Thus, the use of antiemetics as adjunctive therapy is common rather than infrequent, although the entire extent of benefit and mechanism of action are uncertain. Well-conducted clinical trials have shown that oral lysine acetylsalicylate plus metoclopramide is an effective option for early migraine therapy and may even be comparable to oral sumatriptan.<sup>4</sup>

Furthermore, nonpharmacological therapies like relaxation training with or without thermal biofeedback, electromyographic biofeedback, and cognitive-behavioral therapy are reported to be effective in preventing migraines compared with placebo and therefore play an increasingly crucial role in successful migraine management.

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*In reply:* We appreciate the comments of Drs Gupta and Gupta regarding step and stratified care and agree that the studies on stratified care show pharmacoeconomic superiority over step care. However, a substantial portion of our article was devoted to clinical variability of migraine attacks. Inherent in this observation is the belief that treatment needs vary based on attack characteristics and that patients need to receive enough education to participate in their own therapeutic decision making. This approach is termed *patient-centered stratified care*.

The studies<sup>1,2</sup> cited by Drs Gupta and Gupta supporting stratified care are important but have a bias in their design. The primary end point was 2-hour pain relief. The within-attack step care was designed for patients to “step up” to zolmitriptan at 2 hours if their initial treatment was ineffective. Therefore, patients were by definition “treatment failures” at 2 hours if they used the step-within-attack approach. Further examination of the 4-hour data in the DISC study<sup>2</sup> reveals numerical superiority for the step-within-attack group. In addition, the stratified model used in these studies is based on waiting for migraine sufferers to experience substantial disability before they are initially stratified to triptan therapy.

We believe effective, early treatment is warranted based on the characteristics of the individual patient’s attack, not on population characteristics. Thus, we support a management model that includes an individual patient’s decision in selecting the most appropriate treatment for each attack. This is particularly important given the range of migraine severity within individual patients and their previous experience with treating attacks earlier while pain intensity is mild.

Regarding the use of antiemetics, we agree they may have an important adjunctive role in the early treatment of

migraine. However, for most patients, intervention early in the migraine attack may prevent severe nausea from developing. When this approach is ineffective, antiemetics should be considered. Regarding the use of lysine acetylsalicylate plus metoclopramide, we agree that this combination can be useful for selected attacks and selected patients. The most critical factor to remember is that individualized care of each acute migraine attack will likely achieve the optimal outcome for each patient. Unfortunately, prospective, randomized studies that focus on prescribing 1 medication or class of medication to all patients cannot offer ideal guidance in identifying the best course of treatment for each migraine episode in each patient.

Finally, we agree that biobehavioral therapy can be important in a comprehensive treatment program for some patients with migraine. We did not intend to diminish the importance

of nonpharmacologic approaches, but our article focused primarily on early drug treatment strategies for migraine.

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