DO WE NEED A NEW MECHANISM OF ACTION FOR ACUTE MIGRAINE TREATMENT?

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Migraine is a heterogeneous disorder, and individual migraineurs often try different classes of compounds in order to find the drug that best works for their migraine headaches. Often, this starts with a myriad of over-the-counter (OTC) analgesics such as acetaminophen or NSAIDs. However, many patients continue to experience severe migraine attacks that are ineffectively treated with OTC analgesics or poorly tolerate their side effects (such as gastrointestinal irritation from NSAID treatment). It is at this point that patients often seek medical care.

The approval of sumatriptan in 1991, followed by the development of other triptans, revolutionized the treatment of migraine. However, despite their proven efficacy, triptans still constitute only 19% of patient days of therapy for migraine. Although 60-70 percent of patients do find pain relief at two hours, only about 25-30% of patients treated with triptans achieved pain freedom at 2 hours and up to 80% of patients do not achieve sustained pain freedom from 2 to 24 hours [1]. In addition, for cardiovascular patients with migraine, triptans are contraindicated. There are limited options for patients after they fail triptans. Further, many migraine patients have co-existing cardiovascular risk factors and may hesitate to take triptans. Finally, migraine is often co-morbid with psychiatric disorders such as depression and anxiety. Concomitant use of triptans with serotonergic medications (selective serotonin reuptake inhibitors/serotonin norepinephrine reuptake inhibitors) is known to be associated with rare cases of serotonin syndrome. These factors may explain why only 10-15% of patients adhere to triptans. A recent claim-based data analysis showed that 53% of patients do not refill their first triptan prescription within two years. Only 7.4% of these 53% decided to try another triptan. Many patients who are dissatisfied with NSAIDs and/or triptans due to limited efficacy, poor tolerability, and/or risk factors/contraindications often resort to treatment with ergots, barbiturates, opiates, or alternative therapies for relief of migraine pain. The use of some of these drugs, however, is associated with development of medication dependent headache, abuse, and dependency. Thus, there remains a large unmet medical need for patients suffering from migraine and a need to have new classes of anti-migraine drugs.