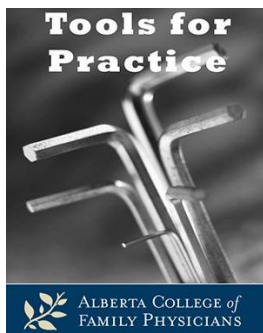


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Evidence Updated: Two systematic reviews added and one updated
Bottom Line: Minor Rewording
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From Headache to Happiness, How to treat a migraine

Clinical Question: Are over-the-counter medications similar in effectiveness to prescription medications?

Bottom Line: Many over the counter medications have similar efficacy to prescription medications in the treatment of acute migraine, including acetaminophen, aspirin, ibuprofen, and naproxen. The combination of acetaminophen, aspirin, and caffeine may offer additional benefit.

Evidence:

- Six systematic reviews on common migraine treatments. Numbers Needed to Treat (NNT) are listed for "two hour pain relief" and "two hour pain free" respectively:
 - Acetaminophen 1,000 mg (2,942 patients):¹ 5, 12
 - Aspirin 1,000 mg (4,222 patients):² 5, 9
 - Ibuprofen 400 mg (2,575 patients):³ 4, 8
 - Naproxen 500 mg or 850 mg (2,149 patients):⁴ 6, 12
 - Sumatriptan 50 mg PO (8,102 patients)⁵ 4, 7
 - Sumatriptan 100 mg PO (7,811 patients):⁵ 4, 5
 - Sumatriptan 50-85 mg + Naproxen 500 mg (7,345 patients):⁶ 4, 5
- Randomized controlled trial (RCT) of 1,555 patients compared acetaminophen 500 mg, aspirin 500 mg, and caffeine 130 mg (AAC) to ibuprofen 400 mg:⁷
 - AAC was superior on weighted sum pain relief score at two hours, $p < 0.03$.
- RCT of 171 patients compared AAC to Sumatriptan 50 mg.⁸
 - AAC was more effective for sum of pain intensity reduction and mean pain relief at both two and four hours, $p < 0.05$.
 - Actual number of patients achieving relief or pain free was not reported for either trial of AAC.
- Unpublished data on clinicaltrials.gov⁹ includes a RCT of 752 patients comparing AAC to Sumatriptan 100 mg.
 - Sumatriptan 100 mg was superior for pain free at two hours, $NNT = 10$.

Context:

- While the acetaminophen, aspirin, and caffeine combination is available in the United States, it is not available in Canada. The individual components, however, are.
- Generic sumatriptan 100 mg is approximately 50 times the cost of all components of AAC combined.
- Up to 7% of patients who use triptans will experience “Triptan Syndrome,” which may include chest and neck tightness, heaviness, paresthesias, and chest pain—but is not associated with cardiac outcomes.¹⁰

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Tools for Practice is a biweekly article summarizing medical evidence with a focus on topical issues and practice modifying information. It is coordinated by G. Michael Allan, MD, CCFP and the content is written by practising family physicians who are joined occasionally by a health professional from another medical specialty or health discipline. Each article is peer-reviewed, ensuring it maintains a high standard of quality, accuracy, and academic integrity. If you are not a member of the ACFP and would like to receive the TFP emails, please sign up for the distribution list at <http://bit.ly/signupfortfps>. Archived articles are available on the ACFP website.

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