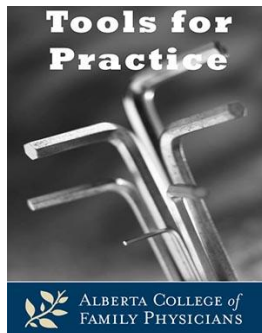


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From Headache to Happiness: New old options for treating acute migraine

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, and ibuprofen. The combination of acetaminophen, aspirin, and caffeine may offer additional benefit.

Evidence:

- Four systematic reviews on common migraine treatments. Numbers Needed to Treat (NNT) are listed for "two hour pain relief" and "two hours pain free" respectively:
 - Acetaminophen 1000mg (2942 patients):¹ 5, 12
 - Aspirin 1000mg (4222 patients):² 5, 9
 - Ibuprofen 400mg (2575 patients):³ 4, 8
 - Sumatriptan 50mg (6447 patients):⁴ 4, 7
 - Sumatriptan 100mg (6571 patients):⁴ 4, 5
- Randomized controlled trial (RCT) of 1555 patients compared acetaminophen 500mg, aspirin 500mg, and caffeine 130mg (AAC) to ibuprofen 400mg:⁵
 - AAC was superior on weighted sum pain relief score at two hours, $p < 0.03$.
- RCT of 171 patients compared AAC to sumatriptan 50mg:⁶
 - 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- Unpublished data on clinicaltrials.gov⁷ includes a RCT of 752 patients comparing AAC to sumatriptan 100mg:
 - Sumatriptan 100mg 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 100mg 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.⁸

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<https://www.surveymonkey.com/s/100TFP>

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