Acute treatment of migraine when triptans and ergots are contraindicated or not tolerated

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Although triptans and ergots are migraine-specific acute treatments and considered to be the standard of care, they are contraindicated in a number of medical conditions including Prinzmetal's angina, hemiplegic migraine, migraine with brainstem aura, ischemic stroke, coronary artery disease, peripheral vascular disease, and pregnancy. Despite a growing body of literature challenging many of these contraindications, they remain on the package labeling at the direction of the US Food and Drug Administration. Even in the absence of contraindications, triptans and ergots are also occasionally not tolerated by patients necessitating a knowledge of treatment alternatives for any provider caring for headache patients.

When selecting any medication, it is important to consider the level of supportive evidence in combination with individual patient-related factors including medical co-morbidities, medication sensitivities, potential medication interactions, and patient preference. All patients should be counseled regarding potential risks of any medications recommended.

When used frequently, many of the medications below have been associated with medication overuse headache and caution should be exercised with opiate, caffeine and butalbital containing medications given the additional potential for abuse, misuse, and dependence. Caution is recommended when using non-steroidal anti-inflammatory medications (NSAIDs) in patients at risk for complications from renal disease or hemorrhage (such as peptic ulcer disease or previous bariatric surgery) and regular use of NSAIDs has also been associated with an increased risk for cardiovascular events. Neuroleptics (including many of the antiemetics listed) are associated with dystonia and tardive dyskinesia and frequent use of steroid is associated with bone loss and iatrogenic Cushing's syndrome. Despite these cautions, each of the medications below has a potential role for specific populations of patients.

Below is a tabulated summary of non-triptan, non-ergot acute treatment options based on recommendations by the American Headache Society (AHS) with additional information and recommendations by the Canadian Headache Society (CHS). All medications listed are oral formulations unless otherwise specified.

Established as Effective	**AHS**	**CHS**	
Medication	Level of Evidence	Recommendation	Quality of Evidence
Analgesic			
Acetaminophen	A	Strong	High
NSAIDs			
Aspirin	A	Strong	High
Diclofenac	A	Strong	High
Ibuprofen	A	Strong	High
Naproxen	A	Strong	High
Opioids			
Butorphanol IN*	A	Strong	Low
Combinations			
Acetaminophen/Aspirin/Caffeine	A		

*Do not use except under exceptional circumstances per recommendation of CHS

Probably Effective	**AHS**	**CHS**	
Medication	Level of Evidence	Recommendation	Quality of Evidence
Antiemetics			
Droperidol IV	B		
Prochlorperazine IV/IM	B		
Metoclopramide IV	B		
Chlorpromazine IV	B		
Metoclopramide		Strong	Moderate
NSAIDs			
Flurbiprofen	B		
Ketoprofen	B		
Ketorolac IV/IM	B		
Other			
Magnesium Sulfate IV	B		
Isometheptene	B		
Combinations			
Codeine†/Acetaminophen	B	Weak	Low

Tramadol†/Acetaminophen	B	Weak	Moderate

†Not recommended for routine use per recommendation of CH

Possibly Effective	**AHS**	**CHS**	
Medication	Level of Evidence	Recommendation	Quality of Evidence
Antiepileptic			
Valproate IV	C		
Antiemetic			
Domperidone		Strong	Low
NSAIDs			
Phenazone	C		
Opioid			
Butorphanol IM•	C		
Meperidine IM•	C		
Methadone IM•	C		
Tramadol IV•	C		
Codeine†	C	Weak	Low
Steroid			
Dexamthasone IV	C		
Other			
Lidocaine IN	C		
Butalbital*	C	Strong	Low
Combinations			
Butalbital*/Acetaminophen/ Caffeine/Codeine†	C	Strong	Low
Butalbital*/Acetaminophen/ Caffeine	C	Strong	Low

•No specified recommendations for *non-oral* opiates per CHS

†Not recommended for routine use per recommendation of CHS

*Do not use except under exceptional circumstances per recommendation of CHS

References:

1. Marmura MJ, Silberstein SD, Schwedt TJ. The acute treatment of migraine in adults: the American Headache Society evidence assessment of migraine pharmacotherapies. *Headache* 2015;55:3-20.
2. Worthington I, Pringsheim T, Gawel MJ, et al. Targeted review: Medications for acute migraine treatment. *Can J Neurol Sci* 2013;40 suppl. 3:S10-S32.