

Table 14.1 Medications Used in Abortive Therapy for Migraine Headache

Medication	Indications	Dosing and onset duration	Side effects affecting rehab	Other side effects or considerations	Drug interactions
NSAIDs					
Ibuprofen (Motrin, Advil)	Migraine headache	200-400 mg every 4-6 h. Onset occurs within 45 min; half-life is 2 h.	Cog: + S: 0 A: 0 Motor: 0 D: ++ Com: + F: +	Gastrointestinal upset, dyspepsia, xerostomia, oral ulceration, glossitis, gastrointestinal mucosal hemorrhage, abrupt acute renal insufficiency, fluid retention, worsening of congestive heart failure, memory loss, confusion, dizziness, headache. Reversible inhibition of platelet aggregation with NSAIDs lasts 1-3 days.	Increased risk of bleeding when used with oral anticoagulant warfarin (Coumadin). Do not combine with aspirin. Antagonizes effects of antihypertensives.
Naproxen (Aleve)	Migraine headache	220 mg every 6-8 h. Onset occurs within 45 min; half-life is 12-17 h.	Cog: + S: 0 A: 0 Motor: 0 D: ++ Com: + F: +	Gastrointestinal upset, dyspepsia, xerostomia, oral ulceration, glossitis, gastrointestinal mucosal hemorrhage, abrupt acute renal insufficiency, fluid retention, worsening of congestive heart failure, memory loss, confusion, dizziness, headache. Reversible inhibition of platelet aggregation with NSAIDs lasts 1-3 days.	Increased risk of bleeding when used with oral anticoagulant warfarin (Coumadin). Do not combine with aspirin. Antagonizes effects of antihypertensives.
Ergot alkaloids					
Dihydroergotamine mesylate (DHE injection or Migranal nasal spray)	Migraine headache	Injection: 1 mg (1 ml) IV, IM, or subcutaneously; repeat at 1 h intervals to total dose of 3 ml (2 ml IV). Maximum dose of 6 ml/wk. Spray: 1 spray (0.5 mg) in each nostril for acute migraine; wait 15 min between sprays. Maximum dose of 2 sprays in each nostril/day. Onset is 15-30 min; half-life is 9 h.	Cog: + S: + A: 0 Motor: ++ D: ++ Com: + F: +	Nausea, vomiting, muscle cramps, tingling in the extremities, difficulty swallowing, chest discomfort, nasal congestion, depression, fatigue, ischemic complications of major body systems including the heart, retroperitoneal fibrosis. Avoid use in patients with heart disease.	Increased effects of vasodilation occur when used with beta blockers, grapefruit juice, or nicotine. Do not take with a macrolide antibiotic (e.g., erythromycin or clarithromycin), HIV protease inhibitor (e.g., ritonavir, nelfinavir, indinavir, amprenavir, or saquinavir), or azole antifungal (e.g., ketoconazole [Nizoral] or itraconazole [Sporanox]). Do not take sumatriptan and dihydroergotamine (DHE 45) within 24 h of each other.

From L. Carl, J. Gallo, and P. Johnson, 2014, *Practical Pharmacology in Rehabilitation: Effect of Medication on Therapy* (Champaign, IL: Human Kinetics).

Medication	Indications	Dosing and onset duration	Side effects affecting rehab	Other side effects or considerations	Drug interactions
Ergotamine tartrate	Migraine headache	2 mg under tongue at first sign of attack; repeat at 30 min intervals. Maximum dose of 6 mg/24 h and 10 mg/wk. Onset is 15-30 min; half-life is 2 h.	Cog: + S: + A: 0 Motor: ++ D: ++ Com: + F: +	Nausea, vomiting, muscle cramps, tingling in the extremities, difficulty swallowing, chest discomfort, nasal congestion, depression, fatigue, ischemic complications of major body systems including the heart, retroperitoneal fibrosis. Avoid use in patients with heart disease.	Increased effects of vasodilation occur when used with beta blockers, grapefruit juice, or nicotine. Do not take with a macrolide antibiotic (e.g., erythromycin or clarithromycin [Biaxin]), HIV protease inhibitor (e.g., ritonavir, nelfinavir, indinavir, amprenavir, or saquinavir), or azole antifungal (e.g., ketoconazole [Nizoral] or itraconazole [Sporanox]). Do not take sumatriptan and DHE 45 within 24 h of each other.
Sympathomimetic					
Isometheptene 65 mg– dichloralphenazone 100 mg– acetaminophen 325 mg (Midrin)	Migraine headache	2 capsules and then 1 capsule/h until relief. Maximum dose of 5 capsules/12 h. Onset is 30-45 min; half-life is 2 h.	Cog: 0 S: 0 A: ++ Motor: ++ D: + Com: 0 F: ++	Dizziness, allergic reactions, skin rash.	Space administration at least 14 days from last dose of monoamine oxidase inhibitors (e.g., isocarboxazid [Marplan], phenelzine [Nardil], selegiline [Eldepryl, Emsam], or tranylcypromine [Parnate]). Avoid concurrent use of tricyclic antidepressants (e.g., amitriptyline [Elavil], nortriptyline [Pamelor], doxepin [Sinequan], or desipramine [Norpramin]).
Serotonin receptor agonists (triptans)					
Sumatriptan (Imitrex)	Migraine headache	Subcutaneous: 6 mg; may repeat dose in 1 h. Maximum dose of 12 mg/day. Onset is 10-15 min; half-life is 2 h.	Cog: ++ S: ++ A: 0 Motor: +++ D: ++ Com: + F: +++	Dizziness, paresthesias, somnolence, asthenia, fatigue, flushing sensations, myalgias, transient increases in blood pressure, nausea, vomiting, ischemic side effects. Avoid use in patients with	Metabolized by monoamine oxidase; fast onset, especially subcutaneous. Treximet is a combination product that contains naproxen.

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Medication	Indications	Dosing and onset duration	Side effects affecting rehab	Other side effects or considerations	Drug interactions
		Intranasal: 5-20 mg, 1 spray in each nostril per dose; may repeat in 2 h. Maximum dose of 40 mg/day. Onset is 15-20 min; half-life is 2 h. Oral: 25-50 mg, repeat in 2 h. Maximum dose of 300 mg/24 h. Onset is 0.5-1.5 h; half-life is 2 h.		cardiac disease.	Avoid concurrent use of SSRI, NSRI, or antidepressants; can result in serotonin syndrome.
Rizatriptan (Maxalt, Maxalt MLT, Maxalt dissolving tablet)	Migraine headache	Oral: 5-10 mg; may repeat in 2 h. Maximum dose of 30 mg/day (15 mg/day if taking propranolol by mouth). Onset is 30-120 min; half-life is 2-3 h. MLT has faster onset.	Cog: ++ S: ++ A: 0 Motor: +++ D: ++ Com: + F: +++	Dizziness, paresthesias, somnolence, asthenia, fatigue, flushing sensations, myalgias, transient increases in blood pressure, nausea, vomiting, ischemic side effects. Avoid use in patients with cardiac disease.	Metabolized by monoamine oxidase-A; fast onset. Avoid concurrent use of SSRI, SSNRI, or antidepressants; can result in serotonin syndrome.
Zolmitriptan (Zomig, ZMT—dissolving form)	Migraine headache	Oral: 2.5-5 mg; may repeat in 1-2 h. Maximum dose of 10 mg/day. Onset is 45 min-1 h; half-life is 3 h. Intranasal: 5 mg; may repeat in 2 h. Maximum dose of 10 mg/day. Onset is 15-20 min. ZMT dissolves on tongue and has faster onset.	Cog: ++ S: ++ A: 0 Motor: +++ D: ++ Com: + F: +++	Dizziness, paresthesias, somnolence, asthenia, fatigue, flushing sensations, myalgias, transient increases in blood pressure, nausea, vomiting, ischemic side effects. Avoid use in patients with cardiac disease.	Metabolized by CYP1A2 and monoamine oxidase-A; has active metabolites that are 2-6 times more potent than parent drug; fast onset. Avoid concurrent use of SSRI, SSNRI, or antidepressants; can result in serotonin syndrome.
Naratriptan (Amerge)	Migraine headache	1-2.5 mg; may repeat in 4 h. Maximum dose of 5 mg/day. Onset is 1-3 h; half-life is 6 h.	Cog: ++ S: ++ A: 0 Motor: +++ D: ++ Com: +	Dizziness, paresthesias, somnolence, asthenia, fatigue, flushing sensations, myalgias, transient increases in blood pressure, nausea, vomiting, ischemic side	Metabolized by CYP450 enzymes. 50% is excreted unchanged by the kidneys. Slow onset and long

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			F: +++	effects. Avoid use in patients with cardiac disease.	duration. Avoid concurrent use of SSRI, SSNRI, or antidepressants; can result in serotonin syndrome.
Almotriptan (Axert)	Migraine headache	6.25-12.5 mg; may repeat in 2 h. Maximum dose of 25 mg/day. Onset is 30 min-2 h; half-life is 3-4 h.	Cog: ++ S: ++ A: 0 Motor: +++ D: ++ Com: + F: +++	Dizziness, paresthesias, somnolence, asthenia, fatigue, flushing sensations, myalgias, transient increases in blood pressure, nausea, vomiting, ischemic side effects. Avoid use in patients with cardiac disease.	Metabolized by CYP3A4, CYP2D6, and monoamine oxidase-A. 40% is excreted unchanged by the kidneys. Avoid concurrent use of SSRI, SSNRI, or antidepressants; can result in serotonin syndrome.
Frovatriptan (Frova)	Migraine headache	2.5 mg; may repeat in 2 h. Maximum dose of 7.5 mg/day. Onset is 2-4 h; half-life is 26 h.	Cog: ++ S: ++ A: 0 Motor: +++ D: ++ Com: + F: +++	Dizziness, paresthesias, somnolence, asthenia, fatigue, flushing sensations, myalgias, transient increases in blood pressure, nausea, vomiting, ischemic side effects. Avoid use in patients with cardiac disease.	Metabolized by CYP1A2 enzymes; slow onset and long duration. Avoid concurrent use of SSRI, SSNRI, or antidepressants; can result in serotonin syndrome.
Eletriptan (Relpax)	Migraine headache	20-40 mg; may repeat once. Maximum dose of 80 mg/day. Onset is 1-2 h; half-life is 4-6 h.	Cog: ++ S: ++ A: 0 Motor: +++ D: ++ Com: + F: +++	Dizziness, paresthesias, somnolence, asthenia, fatigue, flushing sensations, myalgias, transient increases in blood pressure, nausea, vomiting, ischemic side effects. Avoid use in patients with cardiac disease.	Metabolized by CYP3A4 enzymes; fast onset. Avoid concurrent use of SSRI, SSNRI, or antidepressants; can result in serotonin syndrome.

Cog = cognition; S = sedation; A = agitation or mania; Motor = discoordination; D = dysphagia; Com = communication; F = falls; HIV = human immunodeficiency virus; IM = intramuscularly; IV = intravenously; NSAID = nonsteroidal anti-inflammatory drug; NSRI = norepinephrine and serotonin reuptake inhibitor; SSRI = selective serotonin reuptake inhibitor; SSNRI = selective serotonin and norepinephrine reuptake inhibitor.

The likelihood rating scale for encountering the side effects is as follows: 0 = Almost no probability of encountering side effects. + = Little likelihood of encountering side effects. +/++ = Low probability of encountering side effects; however, probability increases with increased dosage. ++ = Medium likelihood of encountering side effects. +++ = High likelihood of encountering side effects, particularly with high doses. ++++ = Highest likelihood of encountering side effects; best to avoid in at-risk patients.