

Table 13.6 Adjuvant Analgesic Medications

Medication	Indications	Dosing	Side effects affecting rehab	Other side effects or considerations
Corticosteroids				
Dexamethasone (Decadron)	Inflammation	2-6 mg by mouth or IV every 6 h.	Cog: ++ S: 0 A: ++ Motor: ++ D: ++ Com: + F: ++	Gastrointestinal upset and ulceration, hyperglycemia, confusion, increased risk of infection.
Prednisone	Inflammation	5-20 mg 1-3 times/day.	Cog: ++ S: 0 A: ++ Motor: ++ D: ++ Com: + F: ++	Gastrointestinal upset and ulceration, hyperglycemia, confusion, increased risk of infection.
Anticonvulsants: Used to treat neuropathic pain. Monitor for liver, hematologic, and renal changes, as well as rash. Anticonvulsant hypersensitivity syndrome can lead to Stevens-Johnson syndrome.				
Carbamazepine (Tegretol)	Neuropathic pain	200 mg by mouth 1-4 times/day.	Cog: ++ S: ++ A: + Motor: ++ D: ++ Com: ++ F: +++	Liver: +++ Hematologic: +++ Renal: +++ Rash: +++ Sedation, hypersensitivity reactions, gastrointestinal upset, appetite changes, slowed cognitive function, lethargy, nausea, headaches, irritability, skin rashes, decreased reaction time, nystagmus, ataxia, dysphagia, dysarthria. Genetic testing required prior to initiation in Asians (risk of AHS).
Phenytoin (Dilantin)	Neuropathic pain	300-400 mg/day.	Cog: ++ S: ++ A: 0 Motor: ++ D: +++ Com: +++ F: ++	Liver: ++ Hematologic: +++ Renal: ++ Rash: ++ Sedation, hypersensitivity reactions, gastrointestinal upset, appetite changes, slowed cognitive function, lethargy, nausea, headaches, irritability, skin rashes, decreased reaction time, nystagmus, ataxia, dysphagia, dysarthria.
Clonazepam (Klonopin)	Neuropathic pain	0.25-0.5 mg 3 times/day.	Cog: + S: + A: 0 Motor: 0 D: 0/+ Com: + F: +	Sedation, gastrointestinal upset, appetite changes.
Gabapentin (Neurontin)	Neuropathic pain	100-1200 mg 3 times/day. Adjust for renal impairment.	Cog: ++ S: ++ A: + Motor: +++ D: 0 Com: ++ F: +++	Liver: 0 Hematologic: 0 Renal: +++ Rash: + Sedation, gastrointestinal upset, appetite changes, ataxia, gait changes, tremor, dizziness, fatigue, ataxia, drowsiness, behavioral changes,

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				peripheral edema, weight gain.
Keppra (Levetiracetam)	Neuropathic pain	20-40 mg/kg by mouth/day. Adjust for renal impairment.	Cog: +++ S: +++ A: 0 Motor: +++ D: + Com: ++ F: +++	Liver: 0 Hematologic: + Renal: +++ Rash: + Somnolence, tiredness, dizziness, upper-respiratory infections. Pyridoxine decreases psychiatric side effects.
Lamotrigine (Lamictal)	Neuropathic pain	5-15 mg/kg by mouth/day.	Cog: ++ S: 0 A: ++ Motor: + D: 0 Com: ++ F: ++	Liver: + Hematologic: 0 Renal: + Rash: + Anticonvulsant hypersensitivity syndrome, insomnia, rash that can progress to Stevens-Johnson syndrome. Avoid in pregnancy.
Pregabalin (Lyrica)	Neuropathic pain	Start at 75 mg twice/day and increase to 150 mg twice/day in 1 wk; titrate to effective dose of 150-225 mg twice/day. Adjust for renal impairment.	Cog: ++ S: ++ A: + Motor: +++ D: 0 Com: ++ F: +++	Liver: 0 Hematologic: 0 Renal: +++ Rash: + Dizziness, somnolence, dry mouth, edema, blurred vision, weight gain, difficulty with concentration and attention.
Topiramate (Topamax)	Neuropathic pain	Start at 25 mg by mouth twice/day and increase by 50 mg/day in divided doses once weekly to 200 mg twice/day.	Cog: ++ S: ++ A: ++ Motor: +++ D: + Com: +++ F: ++	Liver: 0 Hematologic: 0 Renal: +++ Rash: ++ Dizziness, somnolence, dry mouth, edema, blurred vision, weight gain, difficulty with concentration and attention, language impairment, behavioral changes, weight loss, altered taste, metabolic acidosis, kidney stones, hypohidrosis.
Valproic acid (Depakene)	Neuropathic pain	250-2500 mg 2-4 times/day.	Cog: ++ S: ++ A: ++ Motor: ++ D: ++ Com: ++ F: ++	Liver: ++ Hematologic: +++ Renal: 0 Rash: +++ Tremor, dyspepsia, weight gain, anticonvulsant hypersensitivity syndrome, hepatotoxicity, pancreatitis, alopecia, thrombocytopenia, sedation, appetite changes, gastrointestinal upset, rash.
Tricyclic antidepressants				
Amitriptyline (Elavil)	Neuropathic pain	25-150 mg/day at bedtime.	Cog: ++++ S: ++++ A: 0 Motor: ++ D: ++++ Com: ++++ F: ++++	Impaired cognition, sedation, seizure risk, cardiac arrhythmia, sexual dysfunction, orthostasis, gastrointestinal upset.

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Desipramine (Norpramin)	Neuropathic pain	25-300 mg/day at bedtime.	Cog: ++ S: ++ A: + Motor: ++ D: ++ Com: ++ F: +	Impaired cognition, sedation, seizure risk, cardiac arrhythmia, sexual dysfunction, orthostasis, gastrointestinal upset.
Doxepin (Sinequan)	Neuropathic pain	25-150 mg/day at bedtime.	Cog: ++++ S: ++++ A: ++ Motor: ++ D: ++ Com: +++ F: ++++	Impaired cognition, sedation, seizure risk, cardiac arrhythmia, sexual dysfunction, orthostasis, gastrointestinal upset.
Imipramine (Tofranil)	Neuropathic pain	20-100 mg/day at bedtime.	Cog: +++ S: +++ A: + Motor: ++ D: +++ Com: +++ F: ++++	Impaired cognition, sedation, seizure risk, cardiac arrhythmia, sexual dysfunction, orthostasis, gastrointestinal upset.
Nortriptyline (Pamelor)	Neuropathic pain	25-250 mg/day at bedtime.	Cog: +++ S: ++ A: 0 Motor: ++ D: ++ Com: ++ F: +	Impaired cognition, sedation, seizure risk, cardiac arrhythmia, sexual dysfunction, orthostasis, gastrointestinal upset.
Trazodone (Desyrel)	Neuropathic pain	75-225 mg/day at bedtime.	Cog: ++++ S: ++++ A: 0 Motor: ++ D: ++ Com: +++ F: +++	Impaired cognition, sedation, seizure risk, cardiac arrhythmia, sexual dysfunction, orthostasis, gastrointestinal upset.
Norepinephrine serotonin reuptake inhibitor antidepressants				
Duloxetine (Cymbalta)	Neuropathic pain	Start at 20 mg and titrate weekly to 60 mg/day.	Cog: + S: 0 A: + Motor: 0 D: ++ Com: 0 F: +	Somnolence, nausea, dry mouth, decreased appetite, constipation; jitteriness and insomnia at higher doses.
Venlafaxine (Effexor)	Neuropathic pain	Start at 37.5 mg and titrate to 225 mg/day. Maximum dose of 375 mg/day.	Cog: + S: + A: 0/+ Motor: + D: + Com: + F: +	Somnolence, nausea, dry mouth, decreased appetite, constipation; jitteriness and insomnia at higher doses.
Muscle relaxants				
Baclofen	Spasticity	10-15 mg/day in	Cog: ++	Oral: Initial sedation, muscle weakness, ataxia,

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(Lioresal)		3 divided doses; titrate in increments of 1-15 mg/day every 3 days to maximum dose of 60 mg/day.	S: +++ A: ++ Motor: +++ D: ++ Com: ++ F: +++	orthostatic hypotension, fatigue, headache, nausea, dizziness; confusion and hallucinations reported in the elderly or those with history of stroke. Abrupt discontinuation may result in rebound (increased spasticity, rhabdomyolysis, disorientation, hallucination, seizures). Intrathecal: Chronic constipation, hypotonia, somnolence, headache, vomiting, paresthesias.
Antihistamines				
Hydroxyzine (Vistaril)	Anxiety, nausea, insomnia	25-50 mg by mouth or IV every 4-6 h as needed.	Cog: ++ S: ++ A: ++ Motor: ++ D: ++ Com: ++ F: ++	Dry mouth, sedation, orthostasis, confusion, impaired cognition.
Promethazine (Phenergan)	Anxiety, nausea, insomnia	12.5-50 mg by mouth or intramuscularly every 4-6 h.	Cog: ++ S: ++ A: ++ Motor: ++ D: ++ Com: ++ F: ++	Dry mouth, sedation, orthostasis, confusion, impaired cognition.
Local anesthetics and antiarrhythmics				
Lidocaine	Neuropathic pain	5 mg/kg.	Cog: +++ S: +++ A: + Motor: +++ D: ++ Com: ++ F: +++	Sedation, gastrointestinal upset, confusion, tremor, ataxia, seizures.
Tocainide (Tonocard)	Neuropathic pain	400-600 mg by mouth 3 times/day.	Cog: +++ S: +++ A: + Motor: +++ D: ++ Com: ++ F: +++	Sedation, gastrointestinal upset, confusion, tremor, ataxia, seizures.
Psychostimulants				
Dextroamphetamine	Decreases sedation	5-10 mg by mouth/day.	Cog: ++ S: 0 A: ++ Motor: ++ D: ++ Com: + F: ++	Tremor, xerostomia, altered taste, decreased appetite.
Methylphenidate (Ritalin)	Decreases sedation	10-15 mg by mouth/day.	Cog: ++ S: 0 A: ++ Motor: ++ D: ++ Com: +	Tremor, xerostomia, altered taste, decreased appetite.

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			F: ++	

Cog = cognition; S = sedation; A = agitation or mania; Motor = discoordination; D = dysphagia; Com = communication; F = falls; IV = intravenously; AHS = anticonvulsant hypersensitivity syndrome.

The likelihood rating scale for encountering the side effects is as follows: 0 = Almost no probability of encountering side effects. 0/+ = Slight probability of encountering side effects with higher doses. + = 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.