

Medications Commonly Used to Treat Stroke and Its Comorbidities

Drug	Use	Dosage	Route	Side Effects	Other Medical Issues
Antispasmodics/Spasmolytics					
Carisoprodol (Soma)	Skeletal muscle relaxant	350 mg tid and qhs	PO	Drowsiness, ataxia, tremor, nausea/vomiting (N/V), tachycardia	
Chlorzoxazone (Parafon Forte)	Skeletal muscle relaxant	250 to 500 mg tid-qid	PO	Drowsiness, dizziness, N/V, angioedema	
Cyclobenzaprine (Flexeril)	Decrease muscle spasm via brainstem	10 mg tid	PO	Drowsiness, dry mouth, dizziness, N/V, angioedema	
Diazepam (Valium)	Central nervous system (CNS) depressant	2 to 10 mg bid-qid	PO	Drowsiness, ataxia, urinary retention, anxiety	Avoid in first trimester
Methocarbamol (Robaxin)	Skeletal muscle relaxant	1 to 1.5 g qid	PO	Drowsiness, dizziness, N/V, headache (HA)	
Orphenadrine (Norflex/Norgesic)	Skeletal muscle relaxant	100 mg bid 60 mg every 12 hours IV	PO, IV	Drowsiness, dry mouth, dizziness, HA, weakness	
Skelaxin (Metaxalone)	Skeletal muscle relaxant	800 mg tid-qid			
Antispastics					
Baclofen (Lioresal)	Skeletal muscle relaxant	5 to 20 mg tid-qid	PO	Drowsiness, dizziness, weakness, N/V, confusion	
Dantrolene sodium (Dantrium)	Skeletal muscle relaxant	25 mg qd to 100 mg qid	PO, IV	Drug-induced hepatitis	
Diazepam (Valium)	CNS depressant, skeletal muscle relaxant	2 to 10 mg bid-qid	PO	Drowsiness, ataxia, urinary retention, anxiety	Avoid in first trimester
Tizanidine (Zanaflex)	Central alpha 2 adrenergic agonist; central skeletal muscle relaxant	4 to 8 mg tid-qid	PO	Asthenia, drowsiness, ataxia, abnormal liver function tests, dry mouth	Rare cardiac events
Anticonvulsants					
Beclamide (Beclase)	Grand mal, psychomotor seizures	990 to 1980 mg/day	PO	Drowsiness, ataxia, aphonia, agitation, leukopenia	
Carbamazepine (Tegretol)	Grand mal, partial complex, mixed seizures; neuropathic pain	300 to 600 mg bid	PO	N/V, dizziness, complete blood count (CBC) changes, drowsiness, unsteadiness	Therapeutic level 6 to 12 mcg/mL
Clonazepam (Klonopin)	CNS depressant, a benzodiazepine; neuropathic pain	0.5 mg tid to 5 mg qid	PO	Drowsiness, ataxia, aphonia, agitation, confusion, anemia	
Diazepam (Valium)	CNS depressant, for status epilepticus	5 to 10 mg IV push	IV	Respiratory arrest, hypotension, bradycardia	Total dose IV up to 30 mg
Ethosuximide (Zarontin)	Suppresses 3 cycle/sec spike, petit mal seizures	500 mg up to 1000 mg/day	PO	Anorexia, N/V, lethargy, incoordination, CBC changes	Not in pregnancy/nursing
Ethotoin (Peganone)	Grand mal, partial complex seizures	2 to 3 g/day in 4 to 6 doses	PO	Ataxia, sedation, HA, N/V, cardiac dysrhythmias	Monitor blood counts, blood level 15 to 50 mcg/mL
Felbamate (Felbatol)	Partial seizures	Up to 2400 to 3600 mg/day in divided doses	PO	Anorexia, gastrointestinal (GI) discomfort, fever, acute liver failure, bone marrow suppression	Monitor liver function
Gabapentin (Neurontin)	Partial seizures, social phobia	900 to 1800 mg total in tid divided doses	PO	Ataxia, sedation, mania, lability, mood alterations, rare edema and hypertension (HTN)	

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Anticonvulsants—cont'd					
Lacosamide (Vimpat)	Partial onset seizures	150–200 mg bid	PO, IV	Neutropenia, tinnitus, constipation, irritability, paresthesia, memory altered, dysarthria, confusion, dry mouth, nausea, headache, somnolence	May have mild abuse potential from euphoric feeling
Lamotrigine (Lamictal)	Partial seizures	200 to 500 mg/day	PO	Leukopenia, anemia, disseminated intravascular coagulation, hepatitis, Stevens-Johnson syndrome	Must stop immediately in presence of rash
Levetiracetam (Keppra)	Grand mal, partial, psychomotor seizures	Maximum daily dose of 3000 mg	PO	Somnolence, asthenia, infection, dizziness	
Methsuximide (Celontin)	Absence (petit mal), refractory to other medications	Start at 300 mg, up to 1200 mg/day	PO	Diarrhea, nausea, blurred vision, drowsiness, ataxia, headache	
Oxcarbazepine (Trileptal)	Partial seizures, either as adjunct or monotherapy in adults and children over 4 years	300–1200 mg bid	PO	Nausea, Vomiting, Abdominal pain, Headache, Dizziness, Drowsiness, Ataxia, Nystagmus, Altered gait, tremor, fatigue	
Peganone (ethotoin)	Grand mal and complex partial seizures	2000–3000 mg daily in divided doses	PO	Lymphadenopathy, systemic lupus, ataxia, gum hypertrophy, nausea	
Phenobarbital (Luminal)	CNS depressant	50 to 100 mg tid serum 15 to 40 mcg/mL	PO, IV	HA, vertigo, confusion, N/V, respiratory depression; respiratory arrest with IV	15 mg/kg IV in status epilepticus
Phenytoin (Dilantin)	Grand mal, psychomotor seizures; neuropathic pain	100 mg tid	PO, IV	Ataxia, sedation, HA, N/V, cardiac dysrhythmias	Level: 10 to 20 mcg/mL
Pregalbin (Lyrica)	Adjunct for partial onset seizures	150–600 mg/day in divided (bid-tid) doses	PO	Dizziness, somnolence, peripheral edema, dry mouth	Lower dose in renal failure
Primidone (Mysoline)	Barbiturate; grand mal, focal, psychomotor seizures	250 mg tid to 500 mg qid	PO	Ataxia, sedation, HA, N/V, irritability	Level: 5 to 12 mcg/mL
Rufinamide (Banzel)	Adjunctive treatment for patients with Lennox-Gastaut Syndrome (LGS)	200–1600 mg bid	PO	Headache, Dizziness, Fatigue, Nausea, Somnolence	
Tiagabine hcl (Gabitril)	Adjunct in partial seizures	4 mg–32 mg/day	PO	Dizziness, asthenia, drowsiness, nausea, nervousness, tremor	Use in patients over age 12
Topiramate (Topamax)	Grand mal and partial complex seizures	400 mg bid	PO	Acute myopia and narrow angle glaucoma, hyperthermia, oligohydrosis, sudden death, kidney stones, paresthesias, suicidal ideation, dizziness, somnolence, ataxia	Monitor for glaucoma, do not use in pregnancy, Several other warnings

Continued on back endsheets

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Anticonvulsants—cont'd					
Valproic acid (Depakote/Depakene)	Absence seizures; neuropathic pain	1000 to 3000 mg/day	PO	Ataxia, sedation, HA, N/V, aggression	Avoid in pregnancy
Vigabatrin (Sabril)	Refractory Complex Partial Seizures	500–1500 mg bid in adults	PO	Permanent vision loss, diplopia, diarrhea, nausea, fatigue, gait disturbance, weight gain, headache, dizziness, nystagmus, tremor, impaired memory, dyscoordination	30% or more of patients with irreversible loss of peripheral vision – need close monitoring! Only available in special cases
Zonisamide (Zonegran)	Partial seizures in adults	50–300 mg bid	PO, IV	Headache, anorexia, dizziness, irritability, somnolence, fatigue	
Antihypertensives					
ACE inhibitors	Antihypertensive		PO, IV	Nephrotic syndrome	
Alpha-blockers (Minipress, etc.)	Antihypertensive, control of sympathetic dystrophy		PO, IV	Syncope, sedation, HA, urinary retention	
Beta-blockers	Antihypertensive		PO, IV	Congestive heart failure, bradycardia, hypotension, peripheral vascular disease (PVD)	
Calcium channel blockers	Antihypertensive		PO, IV	Dizziness, HA, hypotension	
Direct vasodilators	Antihypertensive		PO, IV	Tachycardia, hypotension, HA	
Diuretics	Antihypertensive		PO, IV	Metabolic/electrolytes, cramps, hypotension, renal failure	
Postganglionic neuron inhibitors	Antihypertensive		PO, IV	Diarrhea, hypotension, depression	
Antidepressants					
Fluoxetine (Prozac)	Antidepressant	20 to 80 mg qd-bid	PO	Anxiety, tremor, insomnia, nausea, diarrhea	
MAO inhibitors	Antidepressant		PO	Dizziness, vertigo, HA, constipation, HTN	Patient must avoid tyramine/tryptophan
Sertraline (Zoloft)	Antidepressant	50 to 200 mg qd-bid	PO	Anxiety, tremor, insomnia, nausea, diarrhea	
Tricyclics (e.g., amitriptyline)	Antidepressant, pain control adjuvant		PO	Myocardial infarction (MI), hypotension, seizures, confusion, leukopenia, paresthesias, N/V, coma, constipation, hepatitis	Best for continuous neuropathic pain
Steroids					
Androgenic steroids	Testicular insufficiency, antineoplastic	25 to 50 mg	IM	Muscle wasting, weakness	
Betamethasone (Celestone)	Inflammation, pain	1- to 9-mg injection	IM, intra-articular	Altered mental status (AMS), osteoporosis, peptic ulcer, glaucoma, diabetes mellitus (DM), HTN	

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Steroids—cont'd					
Cortisone	Addison disease and conditions such as inflammation, swelling, rashes, asthma, and arthritis	35 to 70 mg PO qd	PO	AMS, osteoporosis, peptic ulcer, glaucoma, DM, HTN	
Dexamethasone (Decadron)	Acute spinal cord injury, inflammation, swelling	0.75 to 10 mg up to 1 g	PO, IV	AMS, osteoporosis, peptic ulcer, glaucoma, DM, HTN	1 mg = 20 mg cortisone
Hydrocortisone	Inflammation, swelling, rashes, asthma, arthritis, etc.	Depends on route	IV, PO, IM, topical	AMS, osteoporosis, peptic ulcer, glaucoma, DM, HTN	1 mg = 1 mg cortisone
Prednisone (Deltasone)	Inflammation, swelling, asthma, arthritis, etc.	5 to 60 mg qd	PO	AMS, osteoporosis, peptic ulcer, glaucoma, DM, HTN	1 mg = 5 mg cortisone
Neurologicals					
Baclofen (Lioresal)	Skeletal muscle relaxant, detrusor dyssynergia	5 to 20 mg tid-qid	PO	Drowsiness, confusion, HA, N/V, constipation	Effect only seen in very high doses
Bethanechol (Urecholine)	Cholinomimetic, enhances detrusor contractions	10 to 50 mg tid-qid	PO	N/V, dry mouth, lethargy, constipation, retention	
Dantrolene sodium (Dantrium)	Skeletal muscle relaxant, better emptying in detrusor-external sphincter dyssynergia (DESD)	25 mg qd to 100 mg qid	PO, IV	Drowsiness, dizziness, HA, diarrhea, hepatitis, seizure	
Dicyclomine (Bentyl)	Anticholinergic, DESD	20 to 40 mg qid	PO, IV	N/V, dry mouth, lethargy, constipation, dyspnea	
Ephedrine, propanolamine	Stress incontinence in females		PO	N/V, dry mouth, lethargy, constipation	
Hyoscyamine (Levsin)	Detrusor antispasmodic, DESD	0.125 to 0.25 mg qid or 0.375 to 0.75 mg qd sustained release	PO	N/V, dry mouth, lethargy, constipation	
Imipramine (Tofranil)	Increases outlet resistance, decreases detrusor strength	75 to 150 mg qd	PO	Orthostasis, heart block, N/V, anxiety, confusion, ataxia, dry mouth	
Oxybutynin (Ditropan)	Detrusor antispasmodic, DESD	5 mg bid-tid	PO	N/V, dry mouth, lethargy, constipation	
Phenoxybenzamine (Dibenzyline)	Alpha-blocker, decreases outlet resistance	10 mg bid	PO	Orthostasis, tachycardia, drowsiness, fatigue	
Prazosin (Minipress)	Alpha-blocker, lowers outlet resistance and DESD	1 mg bid-tid	PO	Syncope, sedation, HA, urinary retention	
Anticoagulants					
Acetylsalicylic acid (aspirin)	Permanently acetylates platelets to stop thrombosis	50 to 325 mg qd	PO	Gastric ulcers, bleeding	
Alteplase (Activase)	Clot lysis in acute stroke	Infused and should not exceed 90 mg	IV	Bleeding, extension of stroke, conversion to hemorrhagic stroke,	Also used for acute myocardial infarction

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Anticoagulants—cont'd					
Dalteparin (Fragmin)	DVT prevention and treatment	120 IU/kg body weight, not to exceed 10,000 IU q12 hrs	SQ injection	Bleeding, elevation of liver enzymes (transaminases)	
Enoxaparin (Lovenox)	DVT prevention and treatment	40 mg QD, up to 30 mg bid for knee replacement surgery	SQ injection	Hemorrhage, thrombocytopenia, spinal/epidural hematoma, elevation of liver enzymes (transaminases)	
Heparin	DVT prophylaxis, stroke prevention, PVD	5000 u SQ 12° or up to 1.5 to 2.0 × control	SQ, IV	Increased bleeding, hematomas, GI bleeding	
Ticlopidine (Ticlid)	Stroke prevention	250 mg bid	PO	Diarrhea, N/V, neutropenia, thrombocytopenia, bleeding	
Warfarin (Coumadin)	DVT prophylaxis, stroke prevention, PVD	Titrate to PT	PO	Increased bleeding, hematomas, GI bleeding	
Gastrointestinal Medications					
Anticholinergics (Lomotil)	Antidiarrheal	As per preparation	PO, IM	N/V, dry mouth, lethargy, constipation, retention	
Bisacodyl (Dulcolax)	Constipation, bowel cleaning	1 to 3 tabs qd prn	PO, PR	Diarrhea, nausea	
Chlordiazepoxide (Librax)	Benzodiazepine/anticholinergic combination, irritable bowel syndrome (IBS)	1 to 2 capsules PO tid-qid	PO	N/V, dry mouth, lethargy, constipation, retention	
Dicyclomine (Bentyl)	Anticholinergic, IBS	20 to 40 mg qid	PO, IM	N/V, dry mouth, lethargy, constipation, dyspnea	
Docusates (Colace, etc.)	Stool softener	100 mg tid	PO	Diarrhea, nausea	
Glycopyrrolate (Robinul)	Anticholinergic, peptic ulcer (adjunctive therapy)	1 mg tid	PO, IM	N/V, dry mouth, lethargy, constipation, retention	
Hyoscyamine (Levsin)	Anticholinergic, detrusor antispasmodic, IBS	0.125 to 0.25 mg qid	PO, IV, SL, IM	N/V, dry mouth, lethargy, constipation, retention	
Lactulose (Cephulac)	Constipation, hepatic encephalopathy	30 mL tid-qid	PO, PR	Diarrhea, nausea	
Loperamide (Imodium)	Antidiarrheal	2 mg q stool	PO, IM	Lethargy, constipation	Maximum dose 16 mg/24°
Metoclopramide (Reglan)	Gastroparesis, stimulates GI tract, antiemetic	10 to 15 mg qid	PO, IM	Restlessness, drowsiness, dystonia, hypotension, diarrhea, incontinence	
Paregoric (opioids/diphenylate)	Antidiarrheal	1 to 2 capsules q 4–6 h	PO	Constipation, N/V	
Propantheline (Probanthine)	Peptic ulcer (adjunctive therapy)	30 mg qhs	PO	N/V, dry mouth, lethargy, constipation, retention	
Senna concentrate (Senokot)	Constipation	1 to 2 tabs qhs	PO	Diarrhea, nausea	
Anti-Bone-Forming Agents					
Etidronate disodium (Didronel)	Heterotopic ossification	20 mg/kg/day × 2 wk, then 10 mg/kg/day × 10 wk	PO	Diarrhea, N/V	