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Common Oral Medications that May Need Tapering

Tapering to prevent a withdrawal syndrome or disease state worsening is suggested for several medications. More than one tapering method may be suggested, and the best approach is unknown. Evidence is mostly anecdotal, and a more cautious approach may be needed in certain patients (e.g., high dose, long treatment duration, severe disease). Educate patients and caregivers for which symptoms they should alert the prescriber or seek emergency treatment. Reassure and offer symptomatic relief for milder symptoms. Cognitive-behavioral therapy may be needed in some situations (e.g., benzodiazepine withdrawal).

It has been suggested that medication dose reduction of 25% at weekly or longer intervals, with patient monitoring, is a reasonable approach to tapering in general. When considering a timeline for tapering, take into account the patient's age, comorbidities, concomitant medications, medication half-life, reason for taper (e.g., side effects), and consequences of withdrawal.[1]

Drug or Drug Class	**Rationale for Taper**	**Suggested Taper**
Antidepressants	Withdrawal symptoms (FINISH syndrome): Flu-like symptoms, Insomnia, Imbalance, Sensory disturbances, Hyperarousal.[2] Symptoms usually begin & peak within one week, last one day to three weeks, & are usually mild.[2] Most common with paroxetine (*Paxil*) & venlafaxine (*Effexor*).[3]	All antidepressants should be tapered except perhaps fluoxetine (*Prozac*), which has a long half-life.[3,4] Taper over at least four weeks if taken for at least eight weeks. Consider more prudent approach (e.g., for paroxetine, venlafaxine) of reducing dose by 25% every four to six weeks.[4] Tapering may not completely eliminate symptoms.[2] Educate patients symptoms are usually transient and mild. If symptoms are problematic, return to previous dose or switch to fluoxetine.[3] Also see our *Detail-Document* on switching antidepressants.

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Antipsychotics	Withdrawal symptoms (best-documented with clozapine): sweating, salivation, runny nose, flu-like symptoms, paresthesia, bronchoconstriction, urination, gastrointestinal symptoms, anorexia, vertigo, insomnia, agitation, anxiety, restlessness, movement disorders, psychosis.[5,6]	Antipsychotic taper usually addressed in context of switching to another antipsychotic. Best method of switching & length of taper unknown. Most experts suggest tapering down while up-titrating new medication.[6] Abrupt discontinuation can be appropriate in the event of a serious adverse effect (e.g., agranulocytosis), or in the inpatient setting.[5] Clozapine: some experts suggest at least three weeks.[5] Olanzapine (*Zyprexa*), risperidone (*Risperdal*), "typical" antipsychotics: tapered one to two weeks in some clinical switch trials.[5,7] Some experts suggest managing withdrawal symptoms with benzodiazepines, anticholinergics, antihistamines, or valproic acid.[8]
Baclofen (*Lioresal*)	Hallucinations, delusions, confusion, agitation, anxiety, insomnia, altered consciousness, hyperthermia, spasticity, tachycardia, seizures.[9] Use for over one month is risk factor for delirium.[9]	Taper over one to two weeks.[9]

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Benzodiazepines	Relapse or rebound of condition being treated; withdrawal symptoms: sweating, tachycardia, tremor, insomnia, anxiety, agitation, nausea, vomiting, hallucinations, seizures.[10] Risk factors: use over one year, high dose, short or intermediate half-life (e.g., triazolam [*Halcion*], alprazolam [*Xanax*] (especially if daily dose >4 mg for >12 weeks), lorazepam [*Ativan*]).[10,25,26]	Low dose use: decrease by 20% each week.[10] Direct taper: Decrease by 25% the first week, by 25% the second week, then by about 10% every week (even slower after prolonged use).[10] Diazepam switch & taper: Consider switching short or intermediate half-life drug to equivalent dose of diazepam (e.g., *Valium*) (multiply triazolam dose by 20, alprazolam dose by 10, and lorazepam dose by 5), then taper. Tapering alternatives: (a) decrease by 25% the first week, by 25% the second week, then by 12.5% every seven days; or (b) start with 50% diazepam dose equivalent & reduce by 10% to 20% daily (5% to 10% if diazepam dose >60 mg); or (c) decrease diazepam equivalent by 2 mg every one to two weeks until half of initial dose reached, then by 1 mg every one to two weeks.[10] Alprazolam (*Xanax*): Decrease by no more than 0.5 mg every three days.[25,26,28] Consider slower taper for patients taking ≥4 mg/day for 3 months.[25,26] Per Canadian labeling, if ≥6 mg/day decrease by 0.5 mg every two to three weeks. When at 2 mg/day, decrease by 0.25 mg every two to three weeks.[28] Monitor patient for withdrawal or worsening of condition treated. If needed, continue present dose for a few extra weeks, or return to higher dose if needed.[10]
Beta-blockers	Tachycardia, ventricular arrhythmia, anxiety, myocardial ischemia, angina, heart attack, rebound hypertension.[11,27] Risk factors: hypertension, coronary artery disease (diagnosed or undiagnosed).[27]	Taper over one to two weeks.[11]

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Butalbital combination products (e.g., *Fiorinal*)	Headache exacerbation, tremors, delirium, seizures.[23] Risk factors: continuous, long-term use of seven or more doses daily.[23]	Taper over four to six weeks. If patient taking 12 or more doses daily, consider referral to specialist.[23]
Carisoprodol (*Soma*)	Body aches, sweating, palpitations, sadness, anxiety, restlessness, insomnia.[12]	Long taper (for patients with renal or liver impairment, age >65 years, or total daily dose >1400 mg): 350 mg three times daily for three days, then twice daily for three days, then once daily for three days.[12] Short taper: 350 mg three times daily for one day, then twice daily for two days, then once daily for one day.[12]
Carbamazepine (e.g., *Tegretol*)	Seizures[13]	Ideally, taper should start after new agent is at effective dose. Decrease by 20% of original dose weekly. Faster if liver function impaired, or switching to oxcarbazepine (*Trileptal*). Larger dose reduction in patients with serious adverse effects. Smaller dose reduction if seizure control poor.[13]
Clonidine	Rebound hypertension, headache, restlessness, anxiety, insomnia, sweating, tachycardia, tremor, muscle cramps, hiccups, nausea, salivation; rarely encephalopathy, stroke, death.[14] Risk factors: use for over one month, concomitant beta-blocker use, daily dose >1.2 mg daily, hypertension, cardiovascular disease.[14]	Taper over two to four days. Beta-blockers increase risk of rebound hypertension during withdrawal (noncardioselective most problematic [e.g., propranolol]). If patient is taking a beta-blocker, consider taper of beta-blocker first. Monitor BP closely after clonidine taper.[29] Transdermal: Risk of withdrawal lower than with oral, but consider tapering patches over two to four days or switching to oral clonidine taper.[14]

Drug or Drug Class	Rationale for Taper	Suggested Taper
Corticosteroids	Disease flare (e.g., contact dermatitis, lupus, rheumatoid arthritis).[15] Steroid withdrawal symptoms (e.g., flu-like symptoms, hypotension, weight loss) due to unmasking hypothalamic-pituitary-adrenocortical (HPA) axis suppression.[16]	Dose/duration necessary to cause significant HPA axis suppression unknown. Expect some suppression with prednisone doses >7.5 mg daily for >3 weeks.[16] Risk of disease flare after short-course treatment probably related to treatment duration and specific disease.[15] Taper for situations where HPA axis suppression a concern: Decrease by 5% to 10% weekly until reaching 0.25 mg/kg/day to 0.5 mg/kg/day prednisone equivalent, then taper more slowly, OR decrease daily dose by 2.5 mg (or every-other-day dose by 5 mg) prednisone equivalent every one or two weeks.[16] When physiologic dose is reached (e.g., 5 mg to 7.5 mg prednisone equivalent daily), consider switching to hydrocortisone 20 mg once daily in the morning for two to four weeks, then decrease by 2.5 mg weekly until reaching 10 mg daily, then check morning pre-dose cortisol level.[15,16,24] If normal, hydrocortisone can be discontinued. Restart corticosteroid if disease flare, stress, or steroid withdrawal symptoms occur during the tapering process.[16,24] After long-term treatment, supplemental corticosteroids may be needed during stress, even if morning cortisol level normal.[24]
Felbamate (*Felbatol*)	Seizures[13]	Ideally, taper should start after new agent is at effective dose. Decrease by 25% of original dose weekly. Faster if liver function impaired or patient has serious adverse effect. Larger dose reduction with liver impairment. Smaller dose reduction if seizure control poor.[13]

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Drug or Drug Class	Rationale for Taper	Suggested Taper
Gabapentin (*Neurontin*)	Seizures[13] Withdrawal syndrome: anxiety, insomnia, nausea, pain, sweating.[17]	Ideally, taper should start after new agent is at effective dose. Decrease by 25% of original dose weekly. Faster if renal function impaired or patient has serious adverse effects. Larger dose reduction in patients with serious adverse effects. Smaller dose reduction if seizure control poor.[13]
Guanfacine (*Tenex*)	Anxiety, nervousness, rebound hypertension (less commonly than with clonidine).[18]	No specific taper suggested.
Lamotrigine (*Lamictal*)	Seizures[13]	Ideally, taper should start after new agent is at effective dose. Decrease by 20% to 25% of original dose weekly. Faster if liver function impaired, concomitant valproic acid, or patient has serious adverse effect. Larger dose reduction with liver impairment or switching to valproic acid monotherapy. Smaller dose reduction if seizure control poor.[13]
Levetiracetam (*Keppra*)	Seizures[13]	Ideally, taper should start after new agent is at effective dose. Decrease by 20% to 25% of original dose weekly. Faster taper and larger dose reduction in patients with renal impairment or serious adverse effects. Smaller dose reduction if seizure control poor.[13]
Nitrates	Increased angina[19]	Not usually tapered, but consider tapering over one to two weeks with sublingual nitroglycerin as needed.[19]
Opioids	Runny nose, tearing, chills, myalgia, vomiting, diarrhea, cramps, anxiety, agitation, hostility, insomnia.[20]	Acute pain use: decrease by 20% daily. Chronic use: 10% every three to five days; clonidine may be useful adjunct.[20]

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Oxcarbazepine (*Trileptal*)	Seizures[13]	Ideally, taper should start after new agent is at effective dose. Decrease by 20% to 25% of original dose weekly. Faster if switching to carbamazepine or patient has serious adverse effect. Larger dose reduction for patients with serious adverse effects or switching to carbamazepine monotherapy. Smaller dose reduction if seizure control poor.[13]
Phenobarbital	Seizures[13]	Ideally, taper should start after new agent is at effective dose. Decrease by 10% to 25% of the original dose monthly. Faster if patient has serious adverse effects or has been taking phenobarbital for less than one month. Larger dose reduction for patients with serious adverse effects. Smaller dose reduction if seizure control poor.[13]
Phenytoin (*Dilantin*)	Seizures[13]	Ideally, taper should start after new agent is at effective dose. Decrease by 20% to 25% of original dose weekly. Faster taper and larger dose reduction if liver function impaired. Faster taper for patient with serious adverse effect.[13]
Tiagabine (*Gabitril*)	Seizures[13]	Ideally, taper should start after new agent is at effective dose. Decrease by 20% to 25% of original dose weekly. Faster taper & larger dose reduction if liver function impaired. Faster taper if patient has serious adverse effect. Slower taper if seizure control poor.[13]
Tizanidine (*Zanaflex*)	Hypertension, tachycardia, hypertonia.[21] Risk: high dose for long time.[21]	No specific taper suggested; decrease dose slowly.[21,30]

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Topiramate (*Topamax*)	Seizures[13]	Ideally, taper should start after new agent is at effective dose. Decrease by 20% to 25% of original dose weekly. Faster taper & larger dose reduction if renal function impaired. Faster taper if patient has serious adverse effect. Slower taper & smaller dose reduction if seizure control poor.[13]
Tramadol (*Ultram*, *Ralivia* in Canada)	Anxiety, sweating, insomnia, rigors, pain, nausea, tremors, diarrhea, upper respiratory symptoms, hallucinations (rarely).[22]	Prescribing information states tapering may reduce withdrawal symptoms, but no specific taper suggested.[22,31]
Valproic acid & divalproex sodium (e.g, *Depakene*, *Depakote*)	Seizures[13]	Ideally, taper should start after new agent is at effective dose. Decrease by 20% to 25% of original dose weekly. Faster taper & larger dose reduction if liver function impaired.[13]
Zonisamide (*Zonegran*)	Seizures[13]	Ideally, taper should start after new agent is at effective dose. Decrease by 20% to 25% of original dose weekly. Faster taper if patient has serious adverse effect. Larger dose reduction (due to long half-life) for poor seizure control.[13]

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