

Overview of Pharmacotherapy Options for Withdrawal Management

The following is a summary comparison of withdrawal management pharmacotherapies. Other medications with insufficient evidence for withdrawal management (e.g., valproic acid) were not included.

Drug Name	Benzodiazepines	Carbamazepine	Gabapentin	Clonidine
Drug class	<i>Benzodiazepines</i>	<i>Anticonvulsant</i>		<i>α-adrenergic agonist</i>
Use	<i>For severe symptoms</i>	<i>For mild to moderate symptoms</i>		<i>Can be used alone for mild symptoms or as an adjunct</i>
Concurrent alcohol use	<ul style="list-style-type: none"> ● Potentiate the effects of alcohol; can lead to serious safety risks, including over-sedation, falls, delirium, respiratory depression (e.g., non-fatal or fatal overdose), and prolonged hospitalization 	<ul style="list-style-type: none"> ● No well-described safety risk 	<ul style="list-style-type: none"> ● Abstinence recommended during treatment due to risk of additive CNS-depressive effects ● Note: Studies suggest at therapeutic doses gabapentin is not likely to increase sedation or motor impairment. 	<ul style="list-style-type: none"> ● Risk of additive effect on lowering blood pressure
Contraindications	<ol style="list-style-type: none"> 1. Severe respiratory insufficiency 2. Sleep apnea 3. Myasthenia gravis 4. Narrow angle glaucoma 	<ol style="list-style-type: none"> 1. Hepatic disease 2. Bone marrow depression 3. Serious blood disorder 4. Atrioventricular heart block 5. Pregnancy 	<ol style="list-style-type: none"> 1. Hypersensitivity to gabapentin 	<ol style="list-style-type: none"> 1. Sinus node function impairment 2. Severe bradyarrhythmia 3. Galactose intolerance
Cautions	<ol style="list-style-type: none"> 1. Lactose intolerance 2. Liver dysfunction 3. Renal impairment 4. Breastfeeding or pregnancy 	<ul style="list-style-type: none"> ● Associated with rare blood dyscrasias and Stevens Johnson Syndrome with long-term use ● The HLA-B*15:02 and HLA-A*31:01 alleles increase risk of carbamazepine toxicity³⁴⁵ 	<ul style="list-style-type: none"> ● Renal impairment 	<ul style="list-style-type: none"> ● Hypotension in sensitive patients

Drug Name	Benzodiazepines	Carbamazepine	Gabapentin	Clonidine
Side effects	<ul style="list-style-type: none"> ● Drowsiness, dizziness ● Less common: changes in skin colour, nausea, headache, blurred vision, tremors, hypotension, GI disturbances, memory loss 	<ul style="list-style-type: none"> ● Dizziness, pruritus, ataxia, headache, drowsiness, nausea (all usually minor and temporary) 	<ul style="list-style-type: none"> ● Higher doses may cause ataxia, slurred speech, drowsiness ● Profile is better than other anticonvulsants 	<ul style="list-style-type: none"> ● Hypotension, dry mouth, dizziness, fatigue, headache, nausea, vomiting, constipation, malaise, sleep disorder, sedation, erectile dysfunction
Specific populations	<ul style="list-style-type: none"> ● For older adults and in patients with cirrhosis or severe liver dysfunction, use lorazepam or oxazepam (shorter acting) ● For the general population, use diazepam or chlordiazepoxide (long acting) 	<ul style="list-style-type: none"> ● Increased risk of toxicity in Asian populations, due to the higher frequency of a particular gene ● Cannot be used during pregnancy 		
<p>YOUTH</p> <p>Withdrawal symptoms are rare in youth, and most of those with symptoms do not require medications. In the very rare case where medications are needed, the same approach that is used with adults can be used with youth, and consultation with an addiction specialist is recommended.</p>				
<p>PREGNANCY</p> <p>Inpatient withdrawal management is preferred, to allow close monitoring of fetal movement, heart rate and vital signs. Due to adverse effects on the developing fetus, carbamazepine and clonidine should be avoided. If the benefits of medication outweigh the risks of continued alcohol use to the pregnant person and fetus, then benzodiazepines (short-acting lorazepam or oxazepam) or gabapentin are preferred.</p> <p>BREASTFEEDING</p> <p>Benzodiazepines can be excreted into breast milk. There is limited information on gabapentin. If medications are used, infants should be monitored closely for drowsiness and low weight gain.</p> <p>See the withdrawal management medication table for pregnancy and postpartum for more details.</p>				