

# BENZODIAZEPINES FOR ANXIETY

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# Learning Objectives

1. List common/serious adverse effects of benzodiazepines
2. Identify factors that influence whether a patient is or is not an appropriate candidate for short-term benzodiazepine use for anxiety.
3. Identify key educational points for a patient newly starting on benzodiazepine treatment for anxiety
4. List common/serious benzodiazepine withdrawal symptoms.
5. Develop a taper schedule for a patient who is discontinuing benzodiazepine treatment to minimize risk for withdrawal symptoms

**Bridging Therapy**- used in short-term to alleviate acute anxiety symptoms



**Benzodiazepine**- anxiety significantly impedes performance of ADL and no safety concerns

**\*\*Gabapentin, hydroxyzine, atypical antipsychotic**- alternatives to benzodiazepine therapy for acute treatment if safety concerns exist



**Sleep aid**- anxiety significantly impairing ability to sleep  
-trazodone, mirtazapine, TCA, hydroxyzine

\*\*Not FDA-approved or well studied methods, but are sometimes used in practice due to lack of other options for acute anxiety treatment

# Benzodiazepines

- Act at GABA-A receptor complex in CNS
- Potentiate effects of GABA (main inhibitory neurotransmitter)
- Use: anxiety, insomnia, seizures, alcohol withdrawal, agitation, sedation
  
- Reduce emotional and somatic symptoms of anxiety
- Onset of action: several minutes to hours
- Duration of use: short-term, until maintenance treatments are expected to take effect

# Benzodiazepines

Generic	Brand	Daily dose range (mg)	Elimination Half-life (hrs)	Active metabolite	Metabolic pathway
Lorazepam	Ativan	2 – 10	10 – 20	No	Conjugation
Clonazepam	Klonopin	0.5 – 4	20 – 50	No	Oxidation
Chlordiazepoxide	Librium	15 – 100	> 100	Yes	Oxidation
Oxazepam	Serax	30 – 120	5 – 10	No	Conjugation
Diazepam	Valium	4 – 40	> 100	Yes	Oxidation
Alprazolam	Xanax	0.75 – 4	12 – 15	Yes	Oxidation

*\*\*Conjugated agents preferred in patients on multiple meds, and patients with reduced hepatic function (elderly, alcohol use disorder, etc.)*

# Benzodiazepines

## Adverse Effects

CNS Depression	Cognitive Impairment	Behavior and Mood
<ul style="list-style-type: none"><li>▪ Sedation</li><li>▪ Blurred Vision</li><li>▪ Ataxia</li><li>▪ Psychomotor impairment</li><li>▪ Disorientation</li><li>▪ Respiratory depression</li></ul>	<ul style="list-style-type: none"><li>▪ Confusion</li><li>▪ Slowed mental processes</li><li>▪ Memory impairment</li><li>▪ Dementia</li></ul>	<ul style="list-style-type: none"><li>▪ Paradoxical disinhibition</li><li>▪ Labile mood</li></ul>

# Benzodiazepine Cautions

- Abuse potential (C-IV)
  - Enhance euphoric effects of opioids, synergistic with alcohol
  - Short-half life, high potency and lipophilic agents preferred
- Respiratory Depression
  - Increased risk of fatal overdose when co-ingested with other CNS depressants (**alcohol, opioids**, antihistamines, sedative hypnotics)
  - COPD and other lung conditions
- Elderly
  - Increased risk of falls and other accidents, drug interactions, cognitive dysfunction, dementia, paradoxical disinhibition, withdrawal effects
- Pregnancy category D (teratogenic effects)

# Bridge Therapy with Benzodiazepine

## Consider...

- Indication
  - Bridge therapy possibly indicated if high degree of functional impairment—potentially detrimental to wait several weeks for maintenance therapy to become effective
  - Examples:
    - Frequent and severe panic attacks
    - Inability to leave home
    - Inability to attend or function at work or school
- Safety
  - Abuse potential
  - Mortality/morbidity



# Benzodiazepine Taper

- Minimize withdrawal or rebound symptoms:
  - Anxiety, irritability, insomnia, tachycardia, increased BP, tremor, etc.
  - Seizures, delirium
- Slowly over period of weeks to months (depends on duration of use)
  - 10 - 25% reduction no quicker than every 2 weeks
  - May need to slow rate of taper once 50% of original dose is achieved
- If withdrawal symptoms, resume last tolerated dose and decrease rate of taper
- Consider switch to equivalent dose of agent with longer half-life to facilitate taper (clonazepam)

# Example

- FR is a 54yo male whose physician wishes to taper him off of diazepam.
- Benzodiazepine regimen:
  - Diazepam 5mg po 4 times daily (~2.5 years)—was taking 5mg po TID for ~1 year prior to that
- What taper schedule would you recommend? For each step of the taper include **dose/frequency and duration** (how long to continue before next step down)

# Example

Week 1: 5mg TID

Week 3: 2.5mg QAM; 5mg QPM; 5mg Q bedtime

Week 5: 2.5mg QAM; 2.5mg QPM; 5mg Q bedtime

Week 7: 2.5mg TID

Week 9: 2mg QAM; 2mg QPM; 2mg Q bedtime

Week 11: 1mg QAM; 2mg QPM; 2mg Q bedtime

Week 13: 1mg QAM; 1mg QPM; 2mg Q bedtime

Week 15: 1mg TID

Week 17: 1mg BID

Week 19: 1mg daily

Week 21: Stop

# Questions??

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