

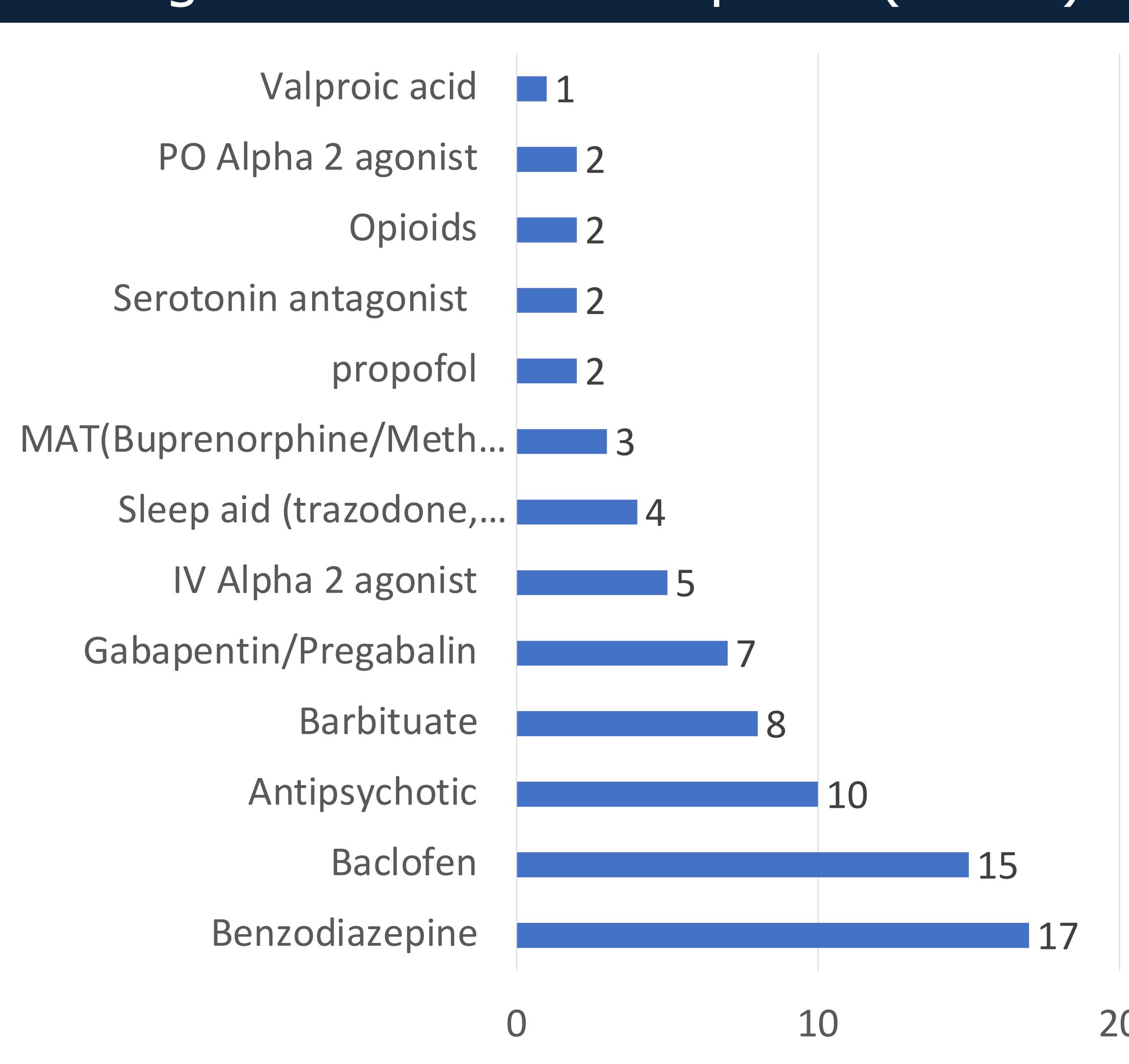
A Systematic Review of Phenibut Withdrawal with a Focus on Complications, Treatment Strategies, and Phenibut Alone or Polysubstance withdrawal

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Background
<ul style="list-style-type: none"> Phenibut is a GABA-B agonist available in the U.S. Little is known about the natural course of withdrawal or how to most appropriately manage it
Methods
<ul style="list-style-type: none"> Systematic review English language peer-reviewed articles or abstracts in humans describing phenibut withdrawal after cessation of phenibut. Databases searched were Ovid/MEDLINE, Web of Science, and Science Direct. Focused on withdrawal time course and treatment approaches
Results
<ul style="list-style-type: none"> 505 articles were screened and 25 were included 100% of articles were case reports

Medications Used for Withdrawal Management in Case Reports (n=25)

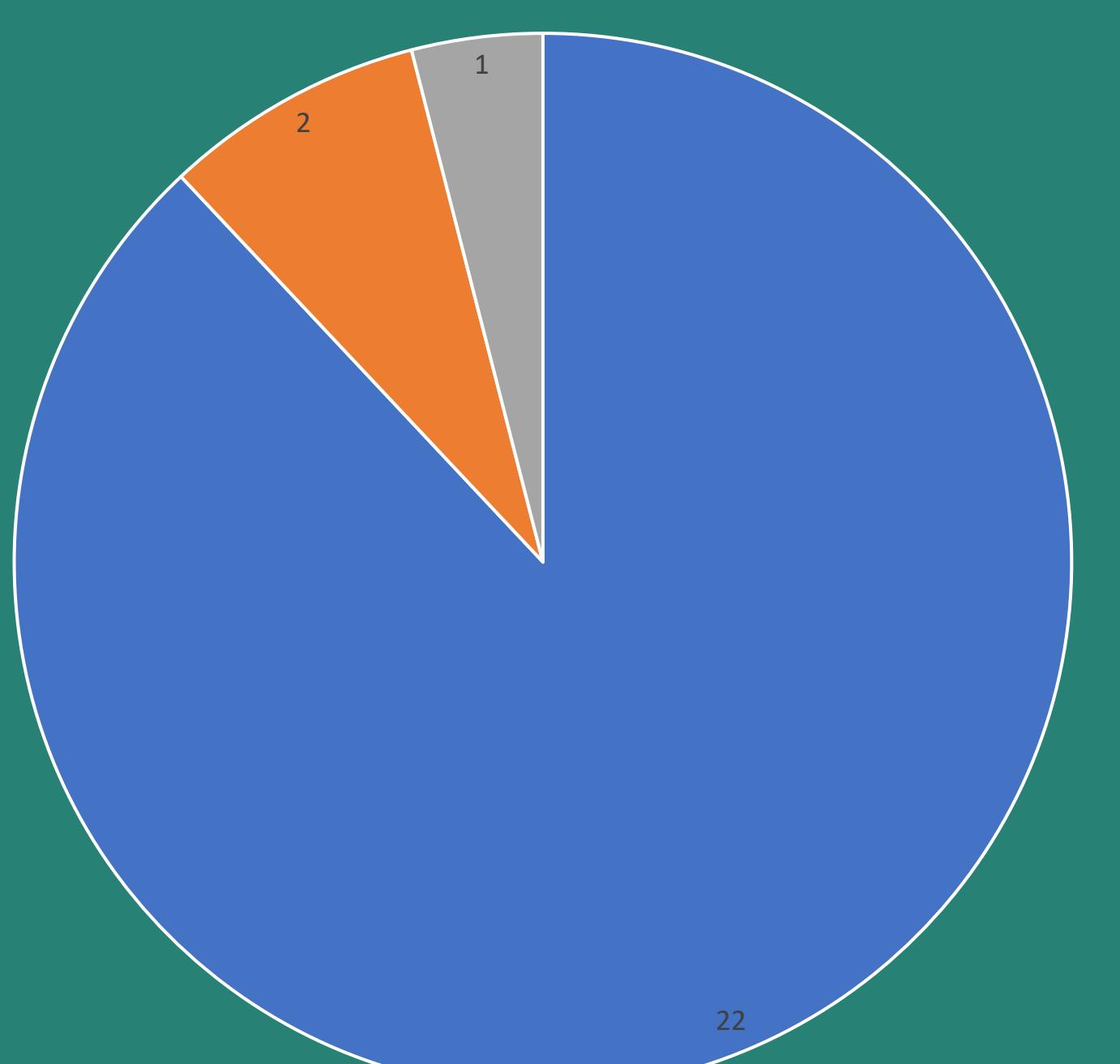


Medication	Number of Case Reports
Valproic acid	1
PO Alpha 2 agonist	2
Opioids	2
Serotonin antagonist	2
propofol	2
MAT(Buprenorphine/Meth...	3
Sleep aid (trazodone,...	4
IV Alpha 2 agonist	5
Gabapentin/Pregabalin	7
Barbituate	8
Antipsychotic	10
Baclofen	15
Benzodiazepine	17

How Bad is Phenibut Withdrawal and How Should We Treat it?

Patient Demographics and Withdrawal Complications		
	Phenibut only withdrawal (n=12)	Polysubstance use with phenibut withdrawal (n=25)
Age (median)	27 year (IQR 21.5-33.25 years, range 0-40)	30 years, (IQR 23.5-34 years, range 0-68 years)
Male sex (%)	100%	100%
Daily phenibut dosage prior to experiencing withdrawal (median), n=number of cases reporting	8 g (IQR 3.125-18.25 g, range 1-28.5 g), n=12	10 g (IQR 4.75-21.5 g, range 1-200 g), n=23,
Lifetime phenibut use duration (median), n=number of cases reporting	8 weeks (IQR 2-36 weeks, range 1-52 weeks), n=7	16 weeks (IQR 4-48 weeks, range 1-104 weeks), n=11
Time to presentation after phenibut cessation (median), n=number of cases reporting	2 days (IQR 1.5-4 days, range 0.5-5 days), n=10	2 days (IQR 0.625-3.25 days, range 0.25-5 days), n=13
Progression of withdrawal severity after the first 24 hours from healthcare contact	75%	64%
Inpatient treatment at a facility with 24-hour nursing care (such as inpatient psychiatry services, detoxification programs, or hospitals) (%)	83.3%	88%
Intensive care unit admission if admitted (%)	66.7%	44%
Intubation (%)	33.3%	24%
Seizure (%)	8.3%	8%
Length of stay*, n=number of cases reporting	4 days (IQR 3-7.5 days, range 3-11 days), n=8	5 days (IQR 3.25-8.75 days, range 1-30 days), n=18

Patient Management Sites



Management Site	Percentage
Inpatient (hospital or inpatient rehabilitation)	22
Outpatient clinic	2
Emergency department evaluation and discharge	1

* in some cases minimum length of stay was calculated based on the clinical course, though an explicit discharge day was not available, thus these data represent a minimum estimate

Discussion

- Withdrawal has high rates of ICU admission, intubation, and seizures. Symptoms usually progress after healthcare contact
- 100% of medication assisted abstinence cases required inpatient management
- 100% of outpatient management utilized a phenibut taper
- Most patients required >2 drug classes, benzodiazepines being most common
- Baclofen is mentioned in 7 titles (28%) but is not the most commonly used agent
- Baclofen was only used successfully during phenibut tapers or as an adjunct with other medicines