Suicidal Attempt with Legally Obtained Phenibut and Tianeptine: A Case of Online-Purchased Psychoactive Substance Abuse

Background

Phenibut (β-phenyl-γ-aminobutyric acid), a γ-aminobutyric acid (GABA)-B receptor agonist originally developed in Russia, and tianeptine, an atypical antidepressant with μ-opioid receptor agonist properties, are increasingly misused psychoactive substances. Despite lacking approval from the U.S. Food and Drug Administration (FDA), both agents are readily available for purchase online and are often marketed as dietary supplements or cognitive enhancers. Their widespread accessibility, combined with limited regulatory oversight, poses significant risks for misuse, dependence, toxicity, and withdrawal.

Case Presentation:
A 25-year-old male with a history of suicidal ideation and a prior suicide attempt in 2023 presented to the emergency department with altered mental status following intentional polysubstance overdose. Over the preceding three weeks, he reported daily use of phenibut powder, tianeptine obtained from international online vendors, and heavy alcohol consumption (approximately half a bottle of vodka daily). On the day of presentation, he ingested a large quantity of phenibut in a suicide attempt and was found unresponsive, requiring naloxone administration for arousal. Upon evaluation, he was awake, alert, and oriented but demonstrated a markedly blunted affect, emotional withdrawal, and ongoing suicidal ideation. He reported perceiving these substances as safe due to their ease of online availability.

Discussion:
Phenibut use is associated with rapid development of tolerance and dependence, with withdrawal symptoms ranging from anxiety and agitation to severe psychosis and hallucinations. Tianeptine misuse carries opioid-like risks, including respiratory depression, dependence, and withdrawal. The variability in product purity and dosing in online formulations significantly increases the risk of overdose. Regulatory ambiguity and limited enforcement actions allow continued access to these substances, particularly among vulnerable populations.

Conclusion:
This case underscores the growing public health threat posed by unregulated psychoactive substances. Increased awareness among healthcare providers, early identification of emerging substance use patterns, patient education, and stricter regulatory measures are critical to mitigating associated morbidity and mortality.

References:

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