Accidental Flibanserin Poisoning in a Child Resulting in CNS Depression and Intubation for Airway Protection

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Background: Flibanserin (Addyi®) was approved in 2015 by the U.S. Food and Drug Administration for the treatment of adult women with acquired generalized hypoactive sexual desire disorder. The approved dose is 100 mg by mouth once daily. Flibanserin is known to cause CNS depression, hypotension, and syncope, and a Risk Evaluation and Mitigation Strategy (REMS) post market surveillance program to monitor these effects is in place. In vitro, flibanserin activates 5-HT\textsubscript{1a}, and antagonizes 5-HT\textsubscript{2a}, 5-HT\textsubscript{2b}, 5-HT\textsubscript{2c}, and D\textsubscript{4} receptors. To our knowledge, no published case reports of flibanserin poisoning in children exist in the medical literature.

Hypothesis: Accidental flibanserin poisoning in children is associated with CNS depression.

Methods: This is a single-patient chart review. An otherwise healthy 2-year-old boy in his usual state of health was brought to the local emergency department after swallowing as many as seven 100 mg tablets of flibanserin approximately 2 hours prior to arrival. The mother reported the child was somnolent and ataxic at home after ingestion.

Results: In the emergency department the child’s pulse was 120 beats/minute; his systolic blood pressure was 110 mmHg. Physical examination revealed spontaneous myoclonic movements and ataxia followed by lethargy. The boy tolerated a nasal airway. Prior to tertiary care center transfer the child was intubated for worsening mental status (Glasgow Coma Scale 6). The child developed a fever to 100.8°F with radiographic evidence of pneumonia, concerning for aspiration. He was extubated on hospital day 3 and discharged home with no sequelae.

Discussion: The degree of CNS depression experienced in flibanserin poisoning is unknown as there are few, if any, published overdoses in the literature. This child developed evidence of aspiration pneumonia after lethargy suggesting the degree of CNS depression was clinically significant. The effects of flibanserin overdose in children are unknown; a minimum toxic dose is also unknown. This case demonstrates even a small number of tablets is dangerous to a child.

Conclusion: Accidental flibanserin poisoning in children may result in serious CNS depression and subsequent intubation for airway protection.