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LETTER TO EDITOR (VIEWERS CHOICE)

UNVEILING THE MYSTERY: HIDDEN CHRONIC TRIHEXYPHENIDYL POISONING IN A 4 YEAR OLD CHILD

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Trihexyphenidyl is a commonly prescribed antimuscarinic drug used in the management of extrapyramidal symptoms and Parkinsonism. Although toxicity is well documented in adults, intentional administration to children is extremely rare. We report a case of Trihexyphenidyl intoxication in a four-year-old boy, later identified as a case of Munchausen Syndrome by Proxy (MSBP).

A previously healthy child presented to the emergency department with severe dehydration, shock, persistent fever, and repeated blood-stained vomiting over five days. Clinical examination revealed mydriasis with sluggish pupillary reaction, delirium, and a distended urinary bladder. Despite stabilization and extensive evaluation including metabolic, infectious, endocrine, and radiological studies no organic cause was identified. MRI brain, abdominal imaging, endoscopy, and toxicological screening for common poisons were unremarkable. Bilateral hydronephrosis noted on ultrasound was unexplained, raising concern for obstructive or neurological etiology.

During hospitalization, the child's symptoms persisted despite controlled medical care. A breakthrough occurred when the grandmother privately disclosed repeatedly witnessing the mother dissolving a tablet into the child's drink, which she described as a "vitamin." The grandmother suspected misuse of psychiatric medication available at home.

A strip of the medication provided by the grandmother was identified as Trihexyphenidyl. Subsequent targeted toxicology confirmed Trihexyphenidyl in the child's urine via Thin Layer Chromatography. Due to delayed suspicion, blood drug levels were non-interpretable.

When confronted with the laboratory results, the mother initially denied wrongdoing but later admitted giving the drug covertly for nearly two weeks. Her justification was that she wanted to prevent the child from "developing psychiatric illness like a relative" aligned with maladaptive caregiving motives consistent with MSBP.

Following removal of maternal access and supervised feeding by hospital staff, the child improved dramatically. Vomiting resolved within 72 hours, consciousness returned to baseline, pupillary reactivity normalized, and bladder distension subsided. Follow-up imaging confirmed complete resolution of hydronephrosis. No antidote was administered, as the child improved with supportive care and cautious monitoring. Physostigmine, being the specific antidote for severe central anticholinergic manifestations, in this case, was avoided due to intermittent bradycardia and improving neurological status.[1,2]

Trihexyphenidyl overdose is known to cause central and peripheral anticholinergic features, including mydriasis, tachyarrhythmia, urinary retention, hyperthermia, delirium, and hallucinations.[3] In this case, the presence of urinary retention with hydronephrosis and altered mental status strongly suggested chronic rather than acute exposure. The unusual presenting symptom of persistent vomiting likely reflected gastric stasis secondary to anticholinergic effects.

This case underscores the importance of considering toxic ingestion when clinical presentation remains unexplained despite extensive investigations. It also highlights the potential for caregiver-induced harm, especially when access to prescription drugs is unrestricted. Early recognition of MSBP is critical, as delayed identification may result in recurrent harm or life-threatening complications.

The case was reported to child protection authorities, and custody was transferred to the father.

We emphasize the need for heightened clinical suspicion, caregiver psychoeducation, and strict medication safety protocols to prevent similar incidents.[4]

Compliance with Ethical Standards
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