

Case Report

A Case Report of An Adolescent Dependent on Multiple Unspecified Chemicals: An Evolving Trend in Substance Abuse

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Introduction

Addiction has become a complex presentation in recent times, [1] especially among the young age group [2]. This is a case report of an adolescent who started using some unusual psychoactive substances at the age of fifteen, with uniqueness in the usage and his presentations posing diagnostic and management challenges. He assented to writing this case report, while his father consented. He presented with three years of use of a cocktail of 'Ngum', a volatile substance of different brands (Yar Benisheik, Potiskum, and Maiduguri), mixed with the soot of burnt tyres (a toluene-based adhesive) for 2 years duration. He also occasionally inhaled pit latrine vapours to get 'high'. He had two episodes of convulsion on missing the substances. The father also noticed excessive restlessness, undue anger outbursts, and assaultive behaviour in the last two months, during which the 'Ngum' intake was accelerated.

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Abstract

Background: In the modern day, addiction is evolving into complicated presentations [1]. A fifteen-year-old youngster who started misusing strange psychotropic drugs is the subject of this case. The boy's distinct drug use and demeanour make diagnosis and therapy challenging. His father gave his permission for him to write this case report while the boy gave his assent.

Aim: To overcome the diagnostic obstacles, this case study attempts to outline the new advances in substance use.

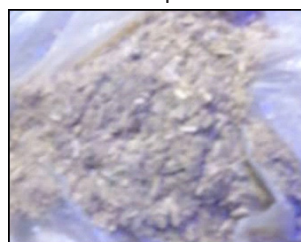
Methods: By using targeted assessments, organizing relevant data, and summarizing the circumstances, the report was prepared.

Case Presentation: A 15-year-old boy was diagnosed with a dependency on psychoactive substances and was admitted to a detoxification unit. A family-based approach was adopted, and drug use charts were used to monitor his condition. After stabilization, rehabilitation was initiated, and his condition improved significantly with improved clinical and psychosocial outcomes. His diagnosis was "Disorder due to use of unknown or unspecified Psychoactive substances."

Conclusion: Substance abuse is a growing trend among adolescents mixing non-specified substances, thus necessitating more explorations. Parents should adopt a favourable parenting style that aids communication, while healthcare workers require a high degree of suspicion for timely Management.

Keywords: "Adolescent"; "Dependence"; "Evolving"; "Trend"; "Unspecified Psychoactive Substances"

There were features of dependence: a sense of compulsion to take a substance, tolerance to the effects of the substance, loss of control of substance-taking behaviour, and preoccupation with substance use for the last 2 years to presentation. No use of alcohol nor other (psychoactive) substances but had convulsions of two episodes.



Ngum powder (sniffed in nostrils)



Seeds (crushed, used sublingually)

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Examination

Examination	Findings
Mental Status Examination	Appeared Disturbed
	Agitated and Combative in behaviour
	Irritable mood.
Physical Examination	Scars around the nostrils
	Stained sublingual mucosa.
	No needle pricks nor other injection marks
Systemic Examination	R.S: Respiratory rate: 16 cycles/minute.
	CVS: Pulse rate: 80 beats/minute.
	Blood pressure: 110/70 mmHg.
	CNS: Nervous System: No Neurologic Deficits
	Other Body Systems: Essentially Normal

Investigations

Investigation	Findings
Biological	
10-panel Urine Drug Toxicology (UDT)	Negative for all substances
Electrolytes, Urea/Creatinine; Urinalysis	Within Normal value limits
Full Blood Count, Liver Function Test	Within Normal value limits
Electroencephalography (EEG)	Normal Sleep and awake EEG
Chest radiograph	Normal Chest findings
Psychological	
Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES)	Recognition: 24 (low score)
	Ambivalence: 12 (low score)
	Taking steps: 19 (low score)
Social	
Family Dynamics	Neglectful parenting style
	Perception of parental approval

Differential Diagnoses

Using the ICD-11 Clinical Description and Diagnostic Guidelines (CDDG): [2]

1. Disorders due to use of volatile inhalants with volatile inhalant-induced psychotic disorder.
2. Disorders due to use of non-psychoactive substances
3. Substance-induced seizure disorder.

Management

A final Diagnosis was made of Disorders due use of unknown or unspecified Multiple Psychoactive substances, current use. A severity risk assessment was done using the Psychopathy Check List – Revised version (PCL-R). On account of the risk of harm to self and others, he was admitted into the Drug Addiction Treatment, Rehabilitation and Education (DATER) unit for the Management of substance dependence with psychosis. After the stabilisation with parenteral antipsychotic, Pharmacological detoxification was commenced with Tabs Carbamazepine and Tabs Risperidone for psychosis. A brief course of supportive psychotherapy was employed by the Child Psychologist, which included analyzing the consequences that followed the misuse, as well as the positive and negative sequelae of drug usage. To aid in the recognition and reduction of cravings, a family-based approach and patient-centred therapy were used. Social workers were invited to make brief interventions to aid him in achieving a behavioural change, as well as to monitor progress and offer encouragement and assistance in rebuilding his life [3]. To avert potentially dangerous circumstances and avoid risky situations, drug logs were created, which indicated when he took the substances and when he abstained.

Conclusion

Following the treatment, there was a decrease in the frequency of volatile substance usage, as well as a decrease in the desire for volatile substances. Also, the general debilitation improved, and rehabilitation was initiated based on the patient's short- and long-term goals. He has been visiting the Rehabilitation clinic regularly, and his overall condition has improved significantly with favorable clinical and psychological outcomes.

References

1. Luethi D, Liechti ME. Designer drugs: mechanism of action and adverse effects. Arch Toxicol. 2020; [cited 2022; 94: 1085–133.
2. World Health Organization. New International Classification of Diseases (ICD-11) comes into effect.
3. Köck P, Meyer M, Elsner J, Dürsteler KM, Vogel M, Walter M. Co-occurring Mental Disorders in Transitional Aged Youth With Substance Use Disorders - A Narrative Review. Front Psychiatry. 2022; 13: 827658.