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PEDIATRIC DRUG-INDUCED DYSTONIA: PATTERNS AND OUTCOMES IN THE EMERGENCY ROOM OF A TEACHING HOSPITAL IN SOUTHWESTERN NIGERIA

Submission Date: December 05, 2023, **Accepted Date:** December 10, 2023,

Published Date: December 15, 2023

Crossref doi: <https://doi.org/10.37547/ijmscr/Volume03Issue12-04>

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ABSTRACT

This study delves into the nuanced landscape of drug-induced dystonia among pediatric patients seeking emergency care at a teaching hospital in Southwestern Nigeria. Titled "Pediatric Drug-Induced Dystonia: Patterns and Outcomes in the Emergency Room of a Teaching Hospital in Southwestern Nigeria," the research explores the epidemiological patterns, clinical characteristics, and outcomes associated with drug-induced dystonia in the pediatric population. Employing a retrospective analysis of medical records, this investigation offers valuable insights into the prevalence, causative factors, and clinical trajectories of drug-induced dystonia, contributing to enhanced diagnostic precision and improved management strategies for pediatric patients.

KEYWORDS

Pediatric healthcare, drug-induced dystonia, emergency room, teaching hospital, epidemiological patterns, clinical outcomes, pediatric emergencies, Southwestern Nigeria, involuntary muscle contractions, medical records analysis.

INTRODUCTION

In the realm of pediatric healthcare, the occurrence of drug-induced dystonia poses a complex challenge, warranting a focused investigation into its patterns and outcomes. This study, titled "Pediatric Drug-Induced Dystonia: Patterns and Outcomes in the Emergency Room of a Teaching Hospital in Southwestern Nigeria," aims to shed light on the epidemiological aspects and clinical ramifications of drug-induced dystonia among pediatric patients attending the emergency room of a prominent teaching hospital.

Dystonia, characterized by involuntary muscle contractions leading to repetitive and often twisting movements or abnormal postures, can be triggered by various medications in pediatric populations. Understanding the patterns of drug-induced dystonia is paramount for healthcare practitioners, offering insights into causative factors, prevalence, and potential preventive measures. Furthermore, an exploration of the outcomes associated with these cases provides valuable information for clinical decision-making and improved patient care.

Southwestern Nigeria, with its unique demographic and healthcare landscape, serves as the specific context for this study. The emergency room of the teaching hospital becomes a focal point for observing and analyzing cases of drug-induced dystonia in

pediatric patients. By unraveling the intricacies of this phenomenon in a localized setting, the research aims to contribute to the existing body of knowledge, guiding healthcare professionals in enhancing diagnostic acumen, therapeutic interventions, and preventive strategies.

As we delve into this investigation, the title "Pediatric Drug-Induced Dystonia" encapsulates the focus on the pediatric population, emphasizing the need for targeted insights within this specific demographic. The study unfolds within the broader context of a teaching hospital in Southwestern Nigeria, providing a contextualized understanding of drug-induced dystonia patterns and outcomes among pediatric patients in emergency care settings.

METHOD

The methodology for investigating "Pediatric Drug-Induced Dystonia: Patterns and Outcomes in the Emergency Room of a Teaching Hospital in Southwestern Nigeria" is designed to provide a comprehensive analysis of drug-induced dystonia cases among pediatric patients seeking emergency care. The research employs a retrospective approach, utilizing medical records and data from a specific healthcare context.

Study Setting:

The study is conducted at a teaching hospital located in Southwestern Nigeria, focusing specifically on the emergency room. This choice of setting is driven by the hospital's significance as a tertiary care facility, which serves as a hub for pediatric emergencies in the region. The location ensures a diverse and representative sample of cases for the study.

Data Collection:

A retrospective data collection approach is adopted, involving the review of medical records spanning a defined period. Cases are identified through systematic screening of patient records, with a specific focus on pediatric instances of drug-induced dystonia. Relevant information is extracted, including demographic details, presenting symptoms, medical history, prescribed medications, and clinical outcomes.

Case Identification and Classification:

Cases are meticulously identified based on predefined criteria that attribute dystonia to pharmacological agents. The classification process ensures that only cases where drug-induced dystonia is evident are included in the study. This step involves the application of standardized diagnostic criteria to maintain consistency and reliability in case identification.

Epidemiological Analysis:

The epidemiological analysis encompasses a detailed examination of demographic patterns within the identified cases. Variables such as age, gender, socio-economic factors, and geographic distribution are scrutinized to discern potential associations with drug-induced dystonia. The prevalence of specific medications implicated in dystonia is also analyzed, contributing to the understanding of pharmacological patterns.

Clinical Characterization and Outcomes Assessment:

Each identified case undergoes thorough clinical characterization, capturing the nature and severity of dystonic symptoms, associated clinical features, and the timeline of onset. Clinical outcomes are assessed, including the response to interventions, length of hospital stay, and any long-term effects. This phase provides a comprehensive picture of the clinical trajectories and outcomes associated with drug-induced dystonia.

Data Synthesis and Statistical Analysis:

The collected data are synthesized for in-depth analysis. Statistical methods are employed to identify correlations, trends, and significant associations within the dataset. The integration of epidemiological and clinical data allows for a holistic exploration of patterns and outcomes associated with drug-induced dystonia in the pediatric emergency care context.

Ethical Considerations:

Ethical considerations are rigorously addressed throughout the research process. The study adheres to ethical guidelines, ensuring patient confidentiality, obtaining informed consent where applicable, and upholding principles of beneficence and justice in medical research.

By implementing this comprehensive methodology, the research aims to contribute valuable insights into the patterns and outcomes of drug-induced dystonia among pediatric patients in the emergency room of a teaching hospital in Southwestern Nigeria.

RESULTS

The investigation into "Pediatric Drug-Induced Dystonia: Patterns and Outcomes in the Emergency Room of a Teaching Hospital in Southwestern Nigeria" yielded valuable insights through the retrospective analysis of medical records. The epidemiological analysis revealed a diverse range of cases, with varying demographic patterns. Notably, certain medications emerged as common culprits, contributing to drug-induced dystonia in the pediatric emergency room. Clinical characterization demonstrated the heterogeneity in the presentation and severity of dystonic symptoms, while clinical outcomes underscored the importance of timely interventions in mitigating the effects of drug-induced dystonia.

DISCUSSION

The discussion interprets the multifaceted findings, emphasizing the significance of understanding drug-induced dystonia patterns and outcomes in pediatric emergency care. The epidemiological analysis points to the need for heightened vigilance when prescribing certain medications to pediatric patients, considering their potential association with dystonic reactions. The clinical characterization highlights the varied clinical presentations, suggesting the importance of individualized approaches to diagnosis and management.

The discussion delves into the implications for clinical practice, emphasizing the role of healthcare professionals in recognizing early signs of drug-induced dystonia and adopting tailored interventions. Consideration is given to the challenges posed by diverse medication regimens and individual patient responses, urging for a nuanced and comprehensive approach to pediatric emergency care.

CONCLUSION

In conclusion, "Pediatric Drug-Induced Dystonia: Patterns and Outcomes in the Emergency Room of a Teaching Hospital in Southwestern Nigeria" contributes valuable insights to the understanding of drug-induced dystonia among pediatric patients. The findings underscore the need for heightened awareness among healthcare practitioners regarding

the potential causative role of certain medications in dystonic reactions. Clinical outcomes emphasize the importance of prompt and targeted interventions to improve patient outcomes in the emergency care setting.

The study provides a foundation for further research, encouraging the exploration of preventive measures and the development of guidelines for prescribing medications to pediatric patients in emergency situations. By shedding light on the patterns and outcomes of drug-induced dystonia, the research contributes to the ongoing discourse on enhancing pediatric emergency care practices in Southwestern Nigeria and beyond.

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