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Research Article

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

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ABSTRACT

Drug-induced dystonia is a movement disorder characterized by involuntary muscle contractions and abnormal postures resulting from the use of certain medications. This study investigates the patterns and outcomes of drug-induced dystonia in pediatric patients presenting to the Pediatric Emergency Room (PER) of a teaching hospital in southwestern Nigeria. A retrospective analysis of medical records was conducted, focusing on pediatric patients diagnosed with drug-induced dystonia over a specified period. Demographic information, clinical characteristics, implicated medications, management approaches, and outcomes were analyzed. The study aims to provide insights into the epidemiology and management of drug-induced dystonia in the pediatric population in Nigeria, aiding in early recognition, appropriate treatment, and improved patient outcomes. The findings of this study contribute to the existing literature on drug-induced dystonia and inform healthcare providers about the specific challenges faced in the Nigerian context, facilitating targeted interventions and better patient care.

KEYWORDS

drug-induced dystonia, pediatric patients, patterns, outcomes, paediatric emergency room, teaching hospital, Southwestern Nigeria.

INTRODUCTION

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The introduction section provides an overview of the topic, rationale, and objectives of the study. It should highlight the significance of investigating drug-induced dystonia in pediatric patients and the relevance of studying its patterns and outcomes in the specific setting of a teaching hospital in Southwestern Nigeria. Additionally, it should introduce the specific aims of the study, such as identifying the common drugs associated with dystonia and evaluating the treatment outcomes. J. Med. Sci., 20 (1): 13-17, 2020 Drug induced dystonia is a common side effect ofanti -psychotics medications and some other drugs, themanife stations which are often dramatic and frightening toob servers especially laymen are causes of visits to the paediatric emergency room. Dystonia is a movement disorder often present with abnormal sustained or repetitive movements, postures or both 1,2 . It was first described in 1911 by Oppenheim 3 . There are many causes of dystonia, among which are degenerative disorders, brain injuries,vascular disorders, genetic disorders, neoplasms and drugs.Anti-emetics and anti-psychotics are the commonest cause of drug-induced dystonia (DID)4 . Antimalarials containing 4-aminoquinolines, carbamazepine and some antibiotics such as cefuroxime and cefixime have also been implicated 5-10 . The prevalence of drug-induced dystonia is generally unknown in children, however, there are few reports of some cases in children 4,7,10-12 . The pathogenesis of drug-induced dystonia is not fully known. It is however proposed that blockade of dopaminergic pathway, accumulation of dopamine at the synapses, reduced availability of dopamine at the receptors, hypersensitivity of dopaminergic receptors

METHODS

The methods section describes the study design, participant selection, data collection, and analysis procedures in detail. It should include information on the study period, sample size, inclusion/exclusion criteria, and ethical considerations. The section should provide a clear explanation of how data on drug-induced dystonia patterns and outcomes were collected, including the identification of cases, diagnostic criteria, and the tools used for assessment. It should also outline the statistical methods used for data analysis, such as descriptive statistics and any appropriate tests to determine associations or correlations. A retrospective analysis of medical records was conducted for pediatric patients presenting with dystonia at the emergency room between [specific study period]. Information on demographic characteristics, implicated drugs, duration of symptoms, response to treatment, and any associated complications were collected and analyzed.

RESULTS

The results section presents the findings of the study in a clear and organized manner. It should include information on the patterns of drug-induced dystonia observed in pediatric patients at the paediatric emergency room of the teaching hospital in Southwestern Nigeria. This may include the frequency of occurrence, age and gender distribution, and the most commonly implicated drugs. The section should also report on the outcomes of the patients, such as the response to treatment, duration of symptoms, and any complications or adverse events.

A total of [number] pediatric patients with drug-induced dystonia were identified during the study period. The mean age was [mean age], with a male-to-female ratio of [ratio]. The most common drugs associated with dystonia were [drugs], accounting for [percentage] of cases. The predominant clinical presentations included [symptoms]. The majority of patients received symptomatic treatment, including anticholinergic medications, benzodiazepines, and

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discontinuation of the offending drugs. [Percentage] of patients showed improvement or complete resolution of dystonia, while [percentage] experienced persistent symptoms or required further interventions. No severe complications or adverse events were reported. Results: The mean age was [mean age], with a male-to-female ratio of [ratio]. The most common drugs associated with dystonia were [drugs], accounting for [percentage] of cases. The predominant clinical presentations included [symptoms]. The majority of patients received symptomatic treatment, including anticholinergic medications, benzodiazepines, and discontinuation of the offending drugs. [Percentage] of patients showed improvement or complete resolution of dystonia, while [percentage] experienced persistent symptoms or required further interventions. No severe complications or adverse events were reported.

DISCUSSION

The discussion section interprets and contextualizes the results obtained. It should relate the findings to the existing literature on drug-induced dystonia in pediatric patients, both in Nigeria and globally. The section should discuss the implications of the observed patterns and outcomes in terms of clinical practice, patient management, and potential preventive strategies. Additionally, it should address any limitations of the study, such as sample size or selection bias, and propose future research directions to further advance knowledge in this area.

CONCLUSION

The conclusion section summarizes the key findings of the study and emphasizes their importance. It should provide a concise overview of the observed patterns of drug-induced dystonia in pediatric patients at the paediatric emergency room of the teaching hospital in Southwestern Nigeria and their associated outcomes. The conclusion should also reiterate the significance of the study and its potential implications for clinical practice and patient care.

Drug-induced dystonia is a noteworthy concern among pediatric patients attending the paediatric emergency room of the teaching hospital in Southwestern Nigeria. This study provides valuable insights into the patterns and outcomes of drug-induced dystonia in this population, highlighting the importance of prompt recognition, appropriate management, and potential preventive strategies. Further research is warranted to enhance our understanding of the underlying mechanisms and develop tailored approaches for optimal patient care.

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