Homoeopathic Management of Cerebral Palsy: A Retrospective Analysis

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Abstract

The presentation of cerebral palsy can be global mental and physical dysfunction or isolated disturbances in gait, cognition, growth, or sensation. It is the most common childhood physical disability. Cerebral palsy is a static neurologic condition resulting from brain injury that occurs before cerebral development is complete. Because brain development continues during the first two years of life, cerebral palsy can result from brain injury occurring during the prenatal, perinatal, or postnatal periods. The goals of treatment are to improve functionality and capabilities toward independence. The study was aimed at the improvement of cerebral palsy cases using homoeopathic medicines. This study includes 20 cases which were taken from the OPD and IPD of Sarada Krishna Homoeopathic Medical College and Hospital Kulasekharam. In the majority of cases, there were few symptoms. Prescription is based on objective symptoms, developmental history, and gestures of the affected children. Even miasmatic evaluation was carried out. The patients were given individualized medicine along with physiotherapy. The improvement was assessed using GMFCS SCALE. The frontline remedies were Calcarea phosphorica, Tuberculinum, Baryta carbonicum, Phosphorus, Tarentula in these cases. The homeopathic medicines gave good, encouraging results.

Keywords: Cerebral palsy, Homeopathy, Individualization, Calcarea phosphorica.

INTRODUCTION

Cerebral palsy is defined as a dynamic disorder of posture and mobility being the motor manifestation of a non- progressive brain damage (static encephalopathy) sustained during the period of brain growth in fetal life, infancy or childhood. [1] Cerebral palsy comes under ICD 11- MMS (8D20- 8D23, 8D2Y and 8D2Z). [2] It is the most common physical disability in childhood. The age limit for brain damage to occur in a patient of CP is 5 years as outlined by the American Academy of Pediatrics population based studies from around the world report that the prevalence of CP is 2/1000 live births in India and 2-6/1000 live births in the west. In India, the most common causes of physical handicap are polio, accounting for 60% and CP, accounting for 25 %.[[3] The overall pooled prevalence of cerebral palsy per 1000 children surveyed was 2.95 (95% CI 2.03–3.88). Sub-group analysis for rural, urban and mixed rural-urban study population demonstrated the pooled prevalence as 1.83 (95% CI 0.41–3.25), 2.29 (95% CI 1.43–3.16) and 4.37 (95% CI 2.24–6.51) respectively.[4] CPARF estimates that approximately 18 million people of all ages have the condition globally. [5] The antenatal causes include malformations of cortical development, maternal infections during first and second trimester of pregnancy, obstetric emergencies like obstructed labour, antepartum haemorrhage, cord prolapse and neonatal encephalopathy. [6] The complications of cerebral palsy include spasticity and contractures; feeding difficulties; drooling; communication difficulties; osteopenia;

osteoporosis; fractures; pain; and functional gastrointestinal abnormalities contributing to bowel obstruction, vomiting, and constipation. The goals of treatment are to improve functionality and capabilities toward independence. [7]

Homoeopathic treatment is based on a philosophical background which is rooted on definite principles of cure. Each individual is considered to be unique so the medicine selected for each case is also unique. It provides effective treatment for Cerebral palsy based on individualization.

OBJECTIVES OF THE RESEARCH

The aim of this retrospective clinical research study is to evaluate the efficacy of homeopathic medicines in the management of Cerebral Palsy (CP). The objectives included identifying the etiology and risk factors contributing to the development of CP, analysing the effect of consanguinity associated with its occurrence, and exploring maternal and neonatal causes linked to the condition. Additionally, the study aimed to assess the improvement in CP cases following homeopathic treatment, providing valuable insights into its potential therapeutic benefits as a holistic and individualized intervention.

MATERIALS AND METHODS

Twenty cases of cerebral palsy were selected for the study.

SELECTION OF SAMPLES

Sample Size that was included for the study is 10, which was done under the technique of purposive sampling.

PROCEDURE

The target sample includes, patients who had the complaint of Cerebral palsy of any age group and both sexes. The symptoms of the patient were recorded in standardized case record format. After analysis the patients were prescribed with individualized homoeopathic remedies and the potency selection was according to the homoeopathic principles.

INCLUSION CRITERIA

Patients who had complaint of Cerebral palsy and patients of both sexes of all age group were included for the study.

EXCLUSION CRITERIA

Patients not having Cerebral palsy, patients with other Developmental delays, patients belonging to Autism spectrum disorders were not included in the study.

SELECTION OF TOOLS

Pre-structured Sarada Krishna Homoeopathic Medical College and Hospital case format, GMFCS Assessment.

OUTCOME ASSESSMENT

The effectiveness of homoeopathic medicines in the management of Cerebral palsy and improvement in the assessment criteria is analyzed.

STATISTICAL TESTS AND DATA ANALYSIS

Data are represented in pie charts, bar diagrams and tables and were analyzed

OBSERVATIONS AND RESULTS

The 10 cases of cerebral palsy were assessed and found that out of these cases, 5 cases belonged to males and 5 cases belonged to females. This is depicted in Figure 1.

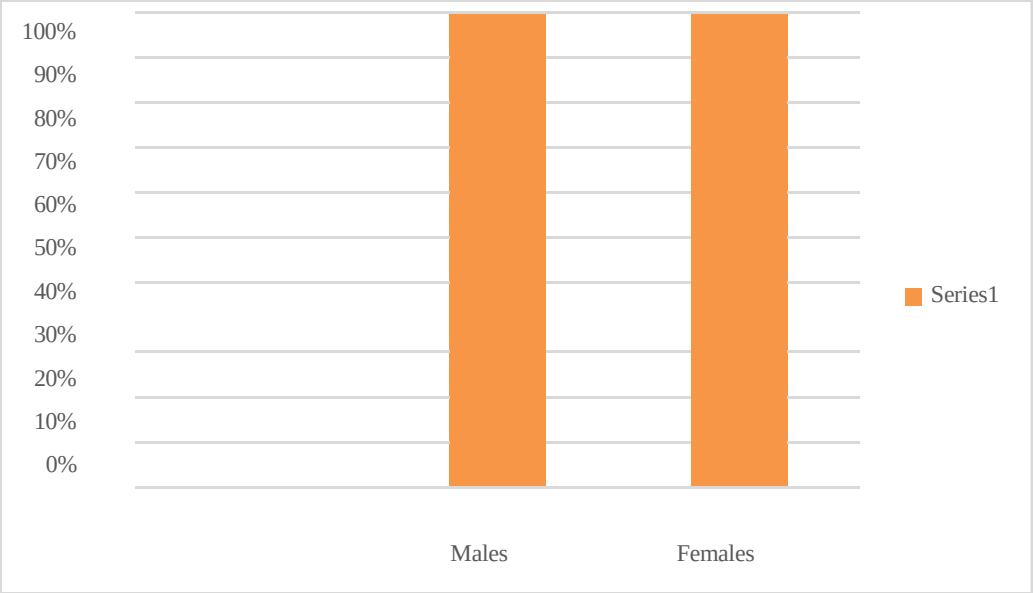


Figure 1 showing sex ratio of Cerebral palsy

The influence of maternal history was assessed. It showed 2 Cases of Gestational Diabetes, 2 Cases of recurrent abortion, 2 cases of emotional stress, 1 case each for maternal infection, trauma and gestational hypertension. This is depicted in Figure 2.

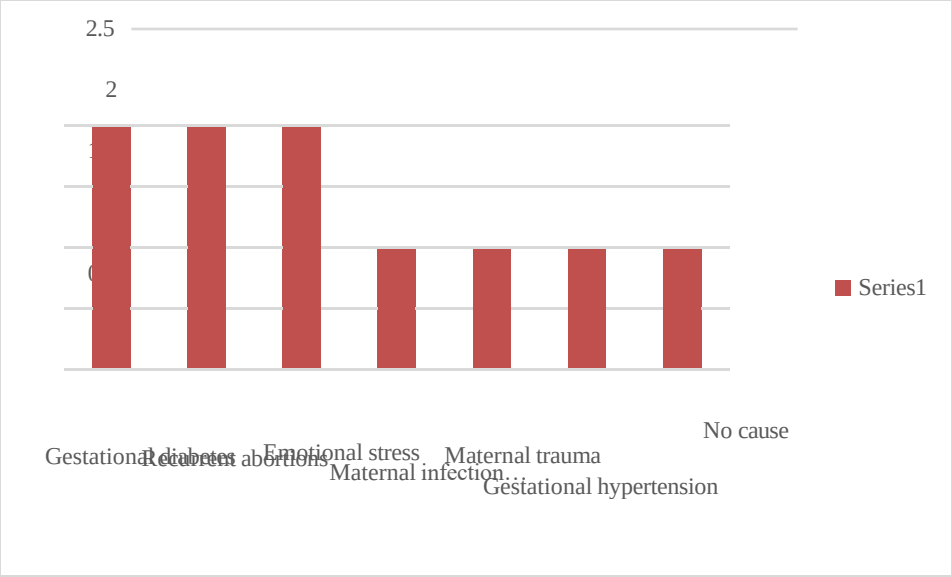


Figure 2 showing the maternal causes of Cerebral palsy

The Figure 3 shows the occurrence of Cerebral palsy among the kids of consanguineous married couples. There were 5 cases.

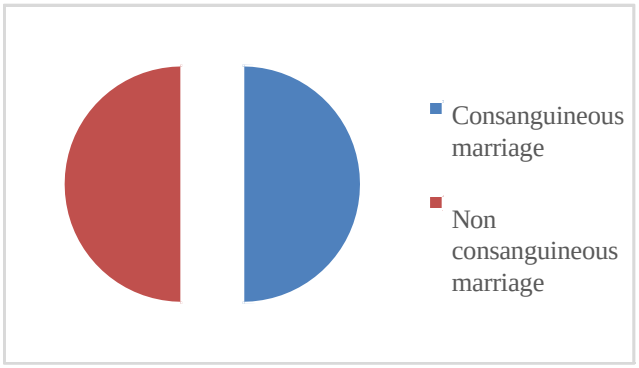


Figure 3 showing the consanguinity

The neonatal history showed 4 cases of delayed labor, 3 cases or pre term birth, 3 cases of birth asphyxia. This is depicted in Figure 4.

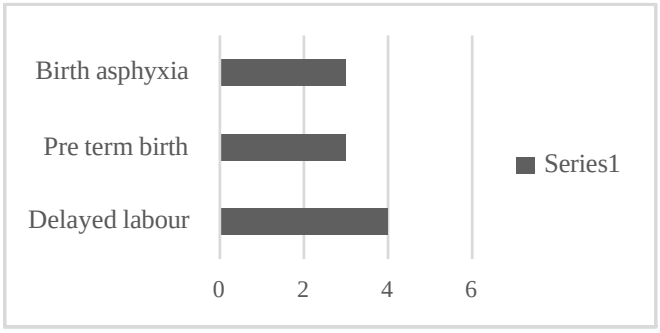


Figure 4 showing the neonatal causes of cerebral palsy

The effect of Familial tendency of Cerebral palsy is depicted in Figure 5. There were 3 cases with history of Cerebral palsy in their family tree.

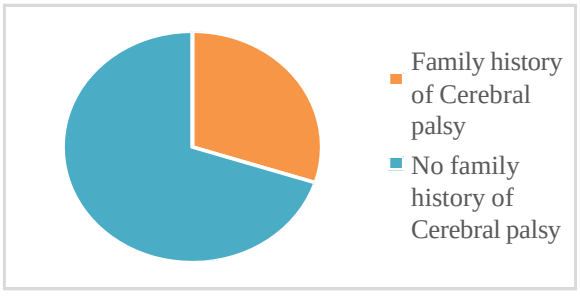


Figure 5 showing the familial tendency of cerebral palsy

The spastic quadriplegia showed in 2 cases, spastic hemiplegia in 3 cases, spastic diplegia in 3 cases, 1 case each of ataxic and Dyskinetic type. This is depicted in Figure 6

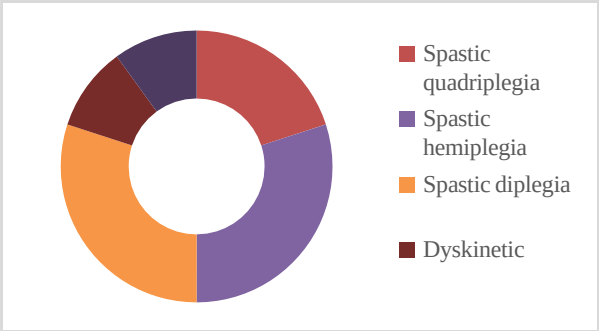
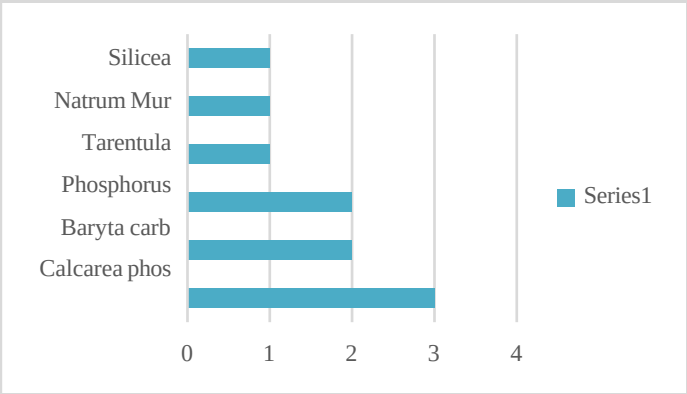


Figure 6 showing the types of cerebral palsy

The medications used were Calcarea phos for 3 cases, 2 cases each for Baryta carb add Phosphorus, 1 case each for Silicea, Natrum Mur and Tarentula. This is depicted in Figure 7.

Figure 7 showing the Homoeopathic medicines of cerebral palsy



The improvement is shown in Figure 9. The cases showed mild improvement.

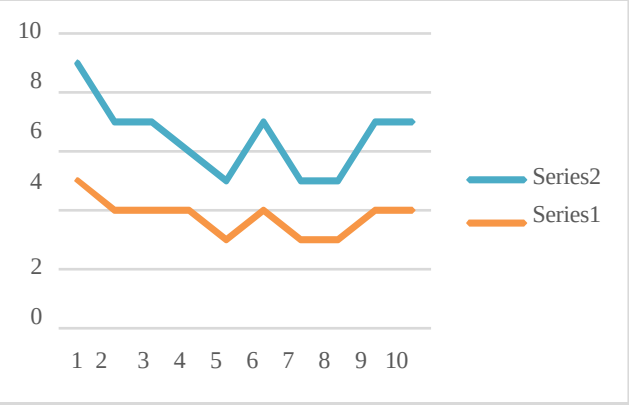


Figure 8 showing before and after treatment score

DISCUSSION

The 10 cases of cerebral palsy were assessed and found that out of these cases, 5 cases belonged to males and 5 cases belonged to females. Usually cerebral palsy will be more common among males as depicted in a study conducted by Michael V Johnston and Henrik Hagberg. [8] The influence of maternal history was assessed. It showed 2 Cases of Gestational Diabetes, 2 Cases of recurrent abortion, 2 cases of emotional stress, 1 case each for maternal infection, trauma and gestational hypertension. A prospective cohort study of Norwegian children born in 1990–2012 and surviving to 2 years of age showed the predominance if maternal history if gestational diabetes. [9] The study showed the occurrence of Cerebral palsy among the kids of consanguineous married couples. There were 5 cases. A similar study highlight the increased need for services in some ethnic populations living in Britain and the likely genetic etiology of a significant proportion of cases of CP in Asian families. [10] The neonatal history showed 4 cases of delayed labour, 3 cases or pre term birth, 3 cases of birth asphyxia. A study showed birth asphyxia, low birth weight, neonatal convulsions, neonatal jaundice, neonatal infection, instrument assisted delivery and antepartum hemorrhage are significant risk factors for cerebral palsy.[11] The effect of Familial tendency of Cerebral palsy showed 3 cases with history of Cerebral palsy in their family tree. A study also showed the family histories of the cerebral-palsied children revealed an unusual number of relatives with cerebral palsy, mental retardation and seizures. [12] The spastic quadriplegia showed in 2 cases, spastic hemiplegia in 3 cases, spastic diplegia in 3 cases, 1 case each of ataxic and dyskinetic type. In another study of 20 cases, 15 (75%) had spastic type of cerebral palsy, which was further classified as diplegia 7 (35%), quadriplegia 6 (30%) and hemiplegia 2 (10%). Mixed and dystonic types were found in 3 (15%) and 2 (10%) children respectively. [13] The medications used were Calcarea phos for 3 cases, 2 cases each for Baryta carb add Phosphorus, 1 case each for Silicea, Natrum mur and Tarentula. A similar study showed front-line remedies were Calcium phosphoricum in 48.27%, Arsenicum album in 37.93%, Baryta carbonica in 24.13%, Agaricus in 20.68% and Tuberculinum used in 41.37% of cases.[14]

CONCLUSION

This is a case series study that involved 19 cases of cerebral palsy. The homoeopathic medicines were based on the thorough individual examination of the case of disease. The homoeopathic intervention in the treatment of cerebral palsy helped in the mild improvement. The consanguineous marriages had shown an impact over the development of cerebral palsy. The maternal gestational diabetes mellitus, history of recurrent abortions, emotional makeup of mother contributed to the developmental delay of the fetus. The familial tendency to develop the disease also played its role. The most frequently used medicines were Calcarea phos and Baryta carb. This is a small case series study. Furthermore case studies is needed to confirm the result.

CONFLICT OF INTEREST

There is no conflict of interest and the research is not sponsored.

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