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Minimal dental intervention in children with cerebral palsy (Case Report)

Mínima intervención dental en niños con parálisis cerebral (Caso Clínico)

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Abstract

Goals: Identify the types of cerebral palsy in children and know what the dental care protocols are for patients with cerebral palsy." Under the philosophy of minimal intervention Level: State, National and International. 2015-2023. Presentation of a Clinical Case, attended under the philosophy of Minimum dental intervention. Methodology: It is a bibliographic review, in articles and meta-analysis, through the following search engines: Google academic, Scielo. The Prisma methodology was used. Original sources in languages: English, Spanish from indexed magazines consulted in databases. Subject reviews, systematic reviews, meta-reviews were included analysis, studies, observations, care guide. Contribution: Create awareness among caregivers and parents of children with cerebral palsy, about early dental care in children, in addition to improving brushing techniques under the minimal dental intervention philosophy, "Prevention is better than cure"

Minimal dental intervention, Cerebral palsy

Resumen

Objetivos: Identificar los tipos de parálisis cerebral en niños y conocer cuáles son los Protocolos de atención dental en pacientes con paralisis cerebral ". Bajo la filosofía de mínima intervención Nivel: Estatal, Nacional e Internacional. 2015-2023. Presentación de un Caso Clínico, atendido bajo la filosofía de Mínima intervención dental, Metodología: Es una revisión bibliográfica, en artículos y metaanálisis, a través de los siguientes buscadores: Google académico, Scielo. Se utilizó la metodología Prisma. Fuentes originales en los idiomas: inglés, español de revistas indezadas consultadas en bases de datos. Se incluyeron revisiones de tema, revisiones sistemáticas, meta-analisis, estudios observaciones guía de atención. Contribución: Crear conciencia entre los cuidadores y padres de familia en niños con parálisis cerebral, sobre la atención dental en niños a temprana, además de mejorar las técnicas de cepillado bajo la filosofía mínima intervención dental, "Prevenir es mejor que Curar"

Mínima intervención dental, Parálisis cerebral

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Introduction

In Zacatecas, cerebral palsy is a public health problem and, therefore, of obligatory attention by governmental health authorities. Cerebral palsy involves, in principle, parents who must be made aware of the need for care, rehabilitation, improvement of the quality of life and social insertion of minors who, even today, remain hidden, hidden and abandoned in their homes as "lumps", sometimes as a result of extreme poverty, but also due to ignorance and social and family rejection.

For its part, the health authorities find it difficult or even impossible to provide sufficient care for these minors, which has motivated organisations such as APAC Zacatecas to carry out different activities with the aim of obtaining resources that will allow them to care for children who, according to scientific and technological advances, are susceptible to rehabilitation.

For some families it is difficult to accept that one of their members has a severe problema severe problem, so they require not only material support but also psychological support in order to accept a child who has psychological support for the acceptance of a child in this highly vulnerable condition.

Cerebral palsy is a heterogeneous group of non-progressive diseases caused by chronic brain damage caused by chronic brain injuries, which originate in the prenatal, perinatal or early perinatal period, perinatal, or in the first years of life. There are 4 main subtypes: spastic, athetoid, ataxic and mixed, The disorder can range from fine motor dyscontrol or severe limb stiffness.

The health care of persons with special needs requires specialised knowledge as well as increased requires specialised knowledge as well as increased dexterity, attention, adaptive and accommodative measures beyond what is considered routine.

Prevention of the most common oral diseases in these children is necessary Children with Cerebral Palsy, dental care, care is complicated by the involuntary movements, in addition to their involuntary movements, in addition to their systemic condition, aesthetic complications, and impediments conditions that contribute to an inadequate deterioration of facial growth, in addition to the facial growth as well as the development of diseases such as caries, paradontoparathy and malocclusion, dental malocclusions, sialorrhea, dental erosion, temporomandibular disorders, among others temporomandibular disorders, among others.

For this reason, the aim is to design protocols for care under the philosophy of Minimum Intervention.

Justification

It is an important public health problem, in addition to the fact that family members are treatment at a systemic level, leaving aside the state of oral health, together with a lack of knowledge on the part of the patient.

This is added to the lack of knowledge on the part of caregivers about preventive measures for oral health care of the oral cavity. A complete set of extracted teeth was mounted on the phantom head, stained with a thin layer of salt.

The teeth were stained with a thin layer of saliva on the labial surfaces and stained with a developer solution stained with developer solution.

The duration of tooth brushing was set at 2 minutes. The efficacy of biofilm removal was evaluated in terms of the differences in the percentage of staining of the staining of the developer solution before and after using the electronic toothbrush, using an image analyser image analyser software. Quantitative data analysis was performed using SPSS (paired t-test; $p<0.01$). Results. The image software analyser software analyser showed staining percentages with developer solution of 59.35 % (±15.13) in the pretest and 38.48% (±20.08) at post-test. Statistical Analyses revealed a significant difference significant difference in the removal of staining developer solution from the teeth using the device.

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Conclusions of this study were: The toothbrush-mounted robotic arm is an effective and innovative and effective instrument that is effective in removing dental biofilm on the tooth surfaces of the tooth surfaces of the wheelchair patient.

Another article from 1 November 2021 was analysed, this one was based on constraint-induced movement therapy for the constraint-induced movement therapy for cerebral palsy: its methodology was a video trial using a video. The aim of this multisite, factorial randomised controlled trial of the multisite randomised controlled trial of the Children's Arm and Hand Movement Project for Children with Hemiparesis (CHAMP), we compared 2 doses and 2 types of constraint-induced movement therapy (CIMT). (CIMT) with the usual treatment as usual. (UCT).

Whose methods were as follows, CHAMP randomly assigned 118 children aged 2-8 years with hemiparetic cerebral palsy to one of 5 treatments with assessments at baseline, end of treatment, and end of treatment hemiparetic cerebral palsy to one of 5 treatments with assessments at baseline, at the end of treatment and 6 months post-treatment and 6 months post-treatment. The primary blinded outcomes were, assessment of the helping hand; Peabody motor development scales, second edition; visuomotor integration; and quality testing of upper extremity skills.

Upper Limb Dissociated Movement skills test. Parents rated functioning on the Activities of Daily Living Scale of the Paediatric Disability Assessment Inventory-Adaptive Test. Disabilities Assessment Inventory-Computer Adaptive Test and the Child's Motor Activity Record how often. Analyses focused on blinded and blinded scores from parent reports and gains per parent reports and rank-ordered gains on all measures.

Findings varied in terms of statistical significance when individual blind outcomes were analysed Individual blinded outcomes, parent reports and rank-ordered earnings were analysed rank order. Consistently, high-dose CIMT, irrespective of the type of restraint, produced a pattern of type of restraint, produced a pattern of greater short- and long-term gains (1.7% probability of occurrence by chance alone).

Probability of occurrence by chance alone) and significant gains in visuomotor integration and movement visuomotor integration and dissociated movement at 6 months. O'Brien's rank-order analyses revealed that high-dose CIMT produced significantly greater improvement than moderate- or significantly greater than moderate dose or UCT. All CIMT groups improved significantly more in parent-reported functioning, compared to the parent-reported functioning compared to UCT. Children on UCT also showed objective gains (e.g., 48% exceeded the smallest detectable auxiliary hand assessment change, compared to UCT) smallest detectable auxiliary hand change, compared to 71% of high-dose CIMT at the end of treatment) end of treatment).

The conclusions from this therapy (CHAMP), provides novel, though complex, findings, with most of the individual blinded results falling below the age-standard significance below statistical significance for group differences, high-dose CIMT consistently produced the best results

Consistently produced the greatest improvements at both time points unexpected finding concerns changes in UCT, towards higher doses, with better results compared to previous reports results compared to previous reports.

One hundred and seventy-three studies were included in this review. Children with cerebral palsy have an increased risk of dental caries and untreated tooth decay. Higher osmolality of saliva is an important factor contributing to increased dental caries dental caries. Individuals with cerebral palsy are more likely to experience tooth wear and bruxism. Children have a poor quality of life related to oral health.

There is a high unmet need for oral health care in this group group. There is no suggested plan for the prevention of poor oral health for this group. A high number of included research-related studies are conducted in low- and middle-income countries in low- and middle-income countries, care should be taken when applying the results outside of this context results outside of this context. There is a lack of research conducted in people with cerebral palsy, aged 18 years and older.

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Conclusion

There is an increased risk of poor oral health in people with cerebral palsy and there is a high unmet need for oral health carea high unmet need for dental care in this group. This study highlights the need for further research to focus on adults with cerebral palsy and to understand the outcomes of oral health care in adults with cerebral palsy and to understand the outcomes of oral health care in the context of the settings.

The authors recommend the inclusion of classification systems and the integration of disability-inclusive language in future studies Another study is worth mentioning: Influence of autonomy and frequency of brushing on oral hygiene in institutionalised people with cerebral palsy.

Bizarra MF (1), Luis HS (1), Bernardo M (1) (1) Faculty of Dentistry, University of Lisbon, Lisbon, Portugal.

Dentistry, University of Lisbon, Lisbon, Portugal Objective: To assess the influence of institutionalisation type and number of years, type of institutionalisation, type and number of years, dependence and frequency of brushing, on dental hygiene in on dental hygiene in individuals with cerebral palsy:

An observational study was developed after approval by the was developed after approval by the Ethics Committee of the Faculty of Dentistry of the University of Lisbon, Portugal of the University of Lisbon, institutional and parental/guardian authorisation. Data collection data collection was done by analysis of medical records, in terms of type of cerebral palsy (CP), dependence and frequency of brushing, years of institutionalisation and type (regimen). (CP), dependence and frequency of brushing, years of institutionalisation and type (daily regime and/or home care) daily regime and/or home care).

– To assess the effectiveness of toothbrushing, the Oral Hygiene Index Simplified (OHI-S) was used.

Simplified Oral Hygiene Index (OHI-S) was used. The inclusion criteria were to be adolescents or adults who attended or lived in institutions with more than 3 persons with PC.

Data were analysed using IBM SPSS Statistics 25 (Statistical Package for the Social Sciences) using the Kruskal Statistical Package for the Social Sciences) using the Kruskal Wallis and Forward Stepwise method for linear regression tests linear regression tests.

Results: Of the 30 institutions evaluated Our misión To improve the oral health and quality of life of people with disabilities and disadvantage and to advocate for equitable disadvantaged and to advocate for equitable oral health care outcomes for the most disadvantaged.

Our mission, to improve the oral health and quality of life of people with disabilities and disadvantage and to advocate for equitable oral health care outcomes for people with disabilities and disadvantages and to advocate for equitable oral health care outcomes for people with special for people with special health care needs. Promote positive attitudes and behaviours towards disability and oral health within the profession through advocacy and profession through advocacy and education and the communitywith The objective of this study was to investigate the relationship between functional classification systems, the Functional functional classification systems, the Manual Ability Classification System (MACS), the Manual Ability

Relationship between the Manual Ability Classification System (MACS), the Gross Motor Function Classification System (GMFCS), and the Gross Motor Function Classification System (GMFCS).

Function Classification System (GMFCS) and functional status (WeeFIM) in children with spastic cerebral palsy spastic cerebral palsyRelationship between gross motor function and the function, activity and participation components of the function, activity and participation components of the International Classification of Functioning in children with spastic cerebral palsy.

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This study aimed to assess the relationship between gross motor function, measured using the Gross Motor Function Measure (GMFM), the Gross Motor Function Classification System (GMFCS), the Gross Motor Function Classification System (GMFCS), the Manual Ability Classification System (MACS) and the Manual Ability Classification System (MACS) and the Functional Independence Measure for Children (WeeFIM), and the Function, Activity and the Function, Activity and Participation components of the International Classification of Functioning, Disability and Health (ICFHD).

Functioning, Disability and Health-Child and Youth Check List (ICF-CY) components in children with spastic cerebral palsy (CP). [Subjects and Methods] Seventy-seven children with spastic cerebral palsy participated in the study cerebral palsy participated in the study.

The GMFM, GMFCS, MACS, and WeeFIM were administered in their entirety to patients without orthoses or mobility aids. The ICF-CY was used to assess the degree of disability and health. [Results] The ICF Activity and Participation component score had a significantly strong correlation with GMFM scores correlated significantly with the GMFM, GMFCS, MACS, WeeFIM and ICF Function component scores.

Function. [Conclusion] When establishing a treatment plan for children with spastic CP, should take into account the physical abilities of the children and their limitation in activity, performance and participation, which would be measured by the Functional Profiles of children with cerebral palsy in Jordan of children with cerebral palsy in Jordan based on the association between gross motor function and gross motor function and manual dexterity. Nihad A Almasri1, et al. (2022).

Background: Cerebral palsy (CP) is the most common cause of physical disability in childhood physical disability in childhood. A major challenge in providing effective services to children with CP is the heterogeneity of the medical condition cerebral palsy is the heterogeneity of the medical condition.

It is expected that the categorisation of children into homogeneous groups based on functional profiles is expected to improve service planning is expected to improve service planning. The objectives of this study were (1) to describe the functional profiles of children with cerebral palsy based on the Gross Motor Function Classification Gross Motor Function Classification System-Expanded and Revised (GMFCS-E & R) and the

Objective:

To identify the types of cerebral palsy in children and to know what the protocols for dental care in patients with cerebral palsy are dental care in patients with cerebral palsy". Under the philosophy of minimum Level: State, National and International. 2015-2023

Methodology

It is a literature review, in articles and meta-analysis, through the following search engines: Google Scholar, Scielo. The Prisma methodology was used. Original sources in the following languages: English, Spanish, from journals consulted in databases. We included topic reviews, systematic reviews, meta-analyses, studies, observations and guidelines reviews, systematic reviews, meta-analyses, studies, observations, care guidelines. Descriptors: Health Care and Network of Care for the Disabled Person Inclusion criteria: Documents where dental care for patients with where dental care in patients with cerebral palsy in preschool children is reported preschool children. Dental care protocols under the minimum intervention philosophy in patients with cerebral patients with cerebral palsy. Search strategies: books, website documents, governmental resolutions and national surveys, published between 2016-2023.

Systematic reviews, meta-analyses, case-control and experimental. Material was organised according to context: state, national, international. Subjects considered children keywords were: children with cerebral palsy, dental care. Websites, government regulation, surveys. Using Boolean AND, OR or NOT indicators.

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Exclusion criteria: documents prior to the year 2016, adult patients and patients with Down's syndrome, autism and other disabilities, among others.

In the content of the article, all graphs, tables and figures must be editable in formats that allow the modification of size, type and number of letters, for editing purposes, these must be in high quality, not pixelated and must be noticeable even if the image is reduced to scale.

Results

18 articles were consulted, in peer-reviewed journals, 4 degree theses in different countries, as can be seen in the following table different countries as can be seen in Figure 1.

They were grouped as follows: articles on parents' and caregivers' knowledge of oral health care and caregivers' knowledge about oral care in children with cerebral palsy.

Experimental study, design of a toothbrush-mounted robotic arm for wheelchair-bound patients in wheelchairs. In Malaysia. In addition, 2 clinical cases were presented, one of a girl with cerebral palsy and the other an ankyloglossia of a child with cerebral palsy cerebral palsy. In addition to 4 meta-analyses on oral health care strategies for children with cerebral palsy, 4 meta-analyses on oral health care strategies for children with cerebral palsy were presented in children with cerebral palsy, as well as the design of a dental care programme for children with cerebral palsy children with cerebral palsy. In addition 2 epidemiological studies on: main oral health problems in children with cerebral palsy oral health problems in children with cerebral palsy and a study of the ceo index in this type of patients.

Different types of sample ranging from 37 to 150 study subjects, different methodologies in each study methodologies in each study. Surveys addressed to parents and caregivers who take care of these children with cerebral children with cerebral palsy.

At the Faculty of Dentistry, University of Teknology UniversitiTeknologi MARA, Sungai Buloh, Malaysia; Lee B. H. (2017).) Faculty of Information Science and Engineering and Engineering, University of Management and Sciences, Shah Alam, Shah Alam, designed the and evaluation of a toothbrush-mounted robotic arm for wheelchair-bound patients in wheelchair patients Al-Bayaty FH, Ahmad MS (Almasri, N. A., , S. H., & et al. (2018).

The aim of this research was, to fabricate a robotic arm mounted on a toothbrush which is toothbrush that is connected to a wheelchair and evaluate its effectiveness in removing dental biofilm dental biofilm.

The methods they used, was to build a robotic arm mounted on a toothbrush. Two hydraulic motors (DC motor), timer and an electronic toothbrush were purchased. They were assembled and attached to the side of the dental chair.

Acknowledgement

Thanks are due to the educational authorities of the kindergarten where the child with cerebral palsy was examined and cared for, as well as to the parents.

Discussion

The patient should be kept in the centre of the chair with arms and legs as close to the body as posible as close to the body as possible. Cushions, flotation devices, trunk and limb cushions can be used, trunk and limb cushions can be used to control involuntary movements and comfort the patient comfort the patient. The patient should be semi-sitting to reduce swallowing difficulty swallowing; if the patient has a wheelchair and prefers to be cared for there, this can and should be done be done. It is advisable to schedule appointments in the morning when the patient is not fatigued.

It is advisable to schedule appointments in the morning when the patient is not fatigued, and to use mouth openers and digital wedges always held in place with dental floss.

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It is important to link the patient to preventive and individualised treatment programmes, including modifications to toothbrushes, toothbrush holders, toothpaste including modifications to brushes, floss holders, anti-plaque rinses and diet, where posible 24. Lopez-Santacruz (2019).

Conclusion

The authors consulted in this review recommend the inclusion of classification systems and the integration of disability-inclusive language in future studies, in addition to classifying the type of paralysis presented by the child. According to the characteristics, a protocol will be proposed for each situation. Promote oral health in caregivers and parents, involve more family members in order to avoid fatigue and exhaustion on the part of the main caregivers, promote oral hygiene, toothbrushes, toothpaste, toothpaste, toothbrushes, toothpaste, toothpaste, toothpaste and toothpaste oral hygiene, toothbrushes, toothpaste according to the size and age of the child with cerebral palsy the old adage that says at the bottom: "PREVENTION IS BETTER THAN CURE". In these patients it is essential to carry it out. Clearly explain the results obtained and the possibilities for improvement.

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