Recibido: 18/09/2020 Aceptado: 27/09/2020

Appli Sci Dent Vol. 1 suppl. 1;66-8

REVISIÓN - RESUMEN

Tratamientos para la sialorrea en personas con Parálisis Cerebral: Una revisión

Treatments for hypersalivation in people with Cerebral Palsy: A review

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RESUMEN

Objetivo: Analizar beneficios de opiones de para las personas con parálisis cerebral (PC).

Material y métodos: A fecha de 04/09, se buscó en las bases de datos PubMed, Scielo, Cochrane Library y LILACS usando los términos: 1."sialorrhea treatment" AND "cerebral palsy", 2. "drooling treatment" AND "cerebral palsy". Criterios de inclusión: Pertinencia con el tema, muestras con al menos diez personas con PC, máximo 5 años de publicación, idioma inglés o español, disponibilidad de texto completo. Criterios de exclusión: reportes de caso, revisiones bibliográficas.

Resultados: Se encontró un total de 93 artículos, de los cuáles 36 estaban repetidos. Tres autores leyeron el resumen de los 57 restantes y, aplicados los criterios de elegibilidad, escogieron 25 (n= 848) para su lectura de texto completo y uso en esta revisión. De ellos: 7 estudios mostraron resultados con intervenciones con toxina botulínica (botox), 5 con intervenciones quirúrgicas, 2 utilizaron entrenamiento masticatorio funcional, 1 estudio de vibración muscular, 1 de uso de anticolinérgicos, 1 de atropina, y 8 estudios compararon dos o más tratamientos. Solo 3 estudios tuvieron una muestra con más de cien individuos.

Conclusión: La evidencia no es concluyente para determinar que un tratamiento es más efectivo que otro. No obstante, hacer mayores esfuerzos en la correcta adaptación a la atención en personas con PC va a permitir tratamientos menos invasivos e igualmente efectivos para la sialorrea.

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VII Jornada Científica de Estudiantes de Odontología UV (Valparaíso, Chile)
Locación: Online
Año: 2020
Presentación Oral
10 de octubre – 11:05 a 11:25 hr

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PALABRAS CLAVE:

Parálisis Cerebral; Sialorrea; Salud Oral; necesidades especiales

KEYWORDS:

Cerebral palsy; Sialorrhea; Oral health; Special care

Appli Sci Dent Vol. 1 Suppl. 1;64-8

ABSTRACT

Objective: Discuss the benefits of treatment options for people with cerebral palsy (CP).

Material and methods: The PubMed, Scielo, Cochrane Library, and LILACS databases were searched using the terms: 1. " Sialorrhea treatment " AND " cerebral palsy ", 2. " drooling treatment " AND " cerebral palsy ". Inclusion criteria: Relevance to the topic, samples with at least ten people with CP, maximum 5 years of publication, English or Spanish language, full-text availability. Exclusion criteria: case reports, bibliographic reviews.

Results: A total of 93 articles were found, of which 36 were duplicates. Three authors read the abstract of the remaining 57 and, after applying the eligibility criteria, selected 25 (n = 848) for full-text reading. Of these: 7 studies showed results with botulinum toxin (botox), 5 with surgical interventions, 2 used functional chewing training, 1 study of muscle vibration, 1 of anticholinergic use, 1 of atropine, and 8 studies compared two or more treatments options. Only 3 studies had a sample with more than 100 individuals.

Conclusion: The evidence is not conclusive to determine whether one treatment is more effective than another. However, making greater efforts to improve and adapt dental care in people with CP will allow less invasive and equally effective hypersalivation treatments.

REFERENCIAS

[1] Bekkers S, van Ulsen KJ, M M Adang E, R T Scheffer A, J A van den Hoogen F. Cost-effectiveness of botulinum neurotoxin A versus surgery for drooling: a randomized clinical trial. Dev Med Child Neurol. 2020.

[2] Bekkers S, Pruijn IMJ, Van Hulst K, Delsing CP, Erasmus CE, Scheffer ART, et al. Submandibular duct ligation after botulinum neurotoxin A treatment of drooling in children with cerebral palsy. Dev Med Child Neurol. 2020

[3] Weitzman RE, Kawai K, Nuss R, Hughes A. A 10-year Retrospective Review of Botulinum Toxin Injections and Surgical Management of Sialorrhea. Cureus. 2020

[4] Reid SM, Westbury C, Guzys AT, Reddihough DS. Anticholinergic medications for reducing drooling in children with developmental disability. Dev Med Child Neurol. 2020

[5] Kok SE, van Valenberg HFJP, van Hulst K, Jongerius P, Erasmus CE, van den Hoogen FJA. Submandibular gland botulinum neurotoxin A injection for predicting the outcome of submandibular duct relocation in drooling: a retrospective cohort study. Dev Med Child Neurol. 2019

[6] Bekkers S, Delsing CP, Kok SE, Van Hulst K, Erasmus CE, Scheffer ART, et al. Randomized controlled trial comparing botulinum vs surgery for drooling in neurodisabilities. Neurology. 2019

[7] Gutierrez GM, Siqueira VL, Loyola-Rodriguez JP, Diniz MB, Guaré RO, Ferreira ACFM, et al. Effects of treatments for drooling on caries risk in children and adolescents with cerebral palsy. Med Oral Patol Oral y Cir Bucal. 2019.

[8] Russo EF, Calabrò RS, Sale P, Vergura F, De Cola MC, Militi A, et al. Can muscle vibration be the future in the treatment of cerebral palsy-related drooling? A feasibility study. Int J Med Sci. 2019

[9] Mikami DLY, Furia CLB, Welker AF. Addition of Kinesio Taping of the orbicularis oris muscles to speech therapy rapidly improves drooling in children with neurological disorders. Dev Neurorehabil. 2019

[10] Delsing CPA, Bekkers S, van Hulst K, Erasmus CE, van den Hoogen FJA. Unsuccessful submandibular duct surgery for anterior drooling: Surgical failure or parotid gland salivation? Int J Pediatr Otorhinolaryngol. 2019

[11] Calim OF, Hassouna HNH, Yildirim YS, Dogan R, Ozturan O. Pediatric Sialorrhea: Submandibular Duct Rerouting and Intraparotid Botulinum Toxin A Injection With Literature Review. Ann Otol Rhinol Laryngol. 2019

[12] Gubbay A, Marie Blackmore A. Effects of salivary gland botulinum Toxin-A on drooling and respiratory morbidity in children with neurological dysfunction. Int J Pediatr Otorhinolaryngol. 2019

[13] Shoval H, Levin J, Friel K, Kim H. Safety of combined salivary gland and multilevel intramuscular onabotulinumtoxinA injections with and without ethanol in pediatric patients with cerebral palsy: A retrospective study. J Pediatr Rehabil Med. 2019;

[14] Sousa S, Rocha M, Patrão F, Pereira G, Reis S, Horta P, et al. Submandibular duct transposition for drooling in children: A Casuistic review and evaluation of grade of satisfaction. International Journal of Pediatric Otorhinolaryngology. 2018.

[15] Inal, Serel Arslan S, Demir N, Tunca Yilmaz, Karaduman AA. Effect of Functional Chewing Training on tongue thrust and drooling in children with cerebral palsy: a randomised controlled trial. J Oral Rehabil. 2017

[16] Dias BLS, Fernandes AR, Maia Filho H de S. Treatment of drooling with sublingual atropine sulfate in children and adolescents with cerebral palsy. Arq Neuropsiquiatr. 2017

[17] van Hulst K, Kouwenberg C V., Jongerius PH, Feuth T, van den Hoogen FJA, Geurts ACH, et al. Negative effects of submandibular botulinum neurotoxin A injections on oral motor function in children with drooling due to central nervous system disorders. Dev Med Child Neurol. 2017

[18] Gonzalez-L MD, Martinez C, Fortuny IB, Suso-Vergara S. Factors in the Efficacy, Safety, and Impact on Quality of Life for Treatment of Drooling with Botulinum Toxin Type A in Patients with Cerebral Palsy. Am J Phys Med Rehabil. 2017

[19] Sagar P, Handa KK, Gulati S, Kumar R. Submandibular duct re-routing for drooling in neurologically impaired children. Indian J Otolaryngol Head Neck Surg. 2016

[20] Montgomery J, McCusker S, Lang K, Grosse S, Mace A, Lumley R, et al. Managing children with sialorrhoea (drooling): Experience from the first 301 children in our saliva control clinic. Int J Pediatr Otorhinolaryngol. 2016

[21] Chaléat-Valayer E, Porte M, Buchet-Poyau K, Roumenoff-Turcant F, D'Anjou MC, Boulay C, et al. Management of drooling in children with cerebral palsy: A French survey. Eur J Paediatr Neurol. 2016

[22] Kok SE, van der Burg JJW, van Hulst K, Erasmus CE, van den Hoogen FJA. The impact of submandibular duct relocation on drooling and the well-being of children with neurodevelopmental disabilities. Int J Pediatr Otorhinolaryngol. 2016

[23] Shariat-Madar B, Chun RH, Sulman CG, Conley SF. Safety of Ultrasound-Guided Botulinum Toxin Injections for Sialorrhea as Performed by Pediatric Otolaryngologists. Otolaryngol - Head Neck Surg (United States). 2016

[24] Lungren MP, Halula S, Coyne S, Sidell D, Racadio JM, Patel MN. Ultrasound-Guided Botulinum Toxin Type A Salivary Gland Injection in Children for Refractory Sialorrhea: 10-Year Experience at a Large Tertiary Children's Hospital. Pediatr Neurol. 2016

[25] Mahadevan M, Gruber M, Bilish D, Edwards K, Davies-Payne D, van der Meer G. Botulinum toxin injections for chronic sialorrhoea in children are effective regardless of the degree of neurological dysfunction: A single tertiary institution experience. Int J Pediatr Otorhinolaryngol. 2016