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Cerebral Palsy. A Life Filled with All Sorts of Difficulties

Abstract

Cerebral palsy (CP) is the most frequent cause of disability in childhood. The clinical state of these children is determined by motoric, cognitive and perceptive disorders, subject to a stable lesion overtime. Nutrition or deglutition disorders are problems associated with CP, with consequences such as faltering growth, malnutrition, aspirations, breathing or dental diseases. In general, parents are not proactively aware of their children´s feeding or deglutition disorders, as they only detect difficulties when breathing is being compromised. Besides the children and youth with CP experience a variety of functional limitations that impact on their participation in day-to-day activities. Through social and community participation they form friendships, gain knowledge, learn skills, express creativity.

Keywords: Cerebral Palsy; Deglutition; Nutrition; Paticipation

Opinion

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Introduction

CP is the most frequent cause of disability in childhood. The clinical state of these children is determined by motoric, cognitive and perceptive disorders, subject to a stable lesion overtime. Regarding energy requirements, CP children have specific needs, due to clinical variability and therapy requirements [1]. The capacity to reach a sufficient suitable oral ingestion is priority. The problem however is when such contribution is not enough. In this sense, parents and/or carers play a fundamental role in detecting difficulties. There is a predominant family rejection to tube feeding even though feeding and swallowing difficulties are present. Enteral tube feeding is reserved to patients with major dysfunction of the swallowing and feeding process, with a high risk of aspiration and/or malnutrition. Tube indication requires providing extensive information to parents or carers, as feeding implies a significant social role, and not only a nutritional support tool [2,3].

In general, CP patients show weight and height below normal if compared to healthy children due to nutritional or endocrine causes, or causes related to bones and muscles. Results from surveys showed a statistically significant correlation between nutritional state and motor function level [4], BMI values & nutritional status worsened with severe motor function and greater MACS levels. Those results are relevant as the association between low weight (BMI) and increased mortality rate of children with CP has recently been confirmed [5]. Children with low weight would be associated with poorer nutritional state that may favour complications, especially infections, due to a worse immunity status. The oral phase is especially important, due to its impact in deglutition, which conditions the nutritional status, and its role in the safety of feeding [2]. There is a direct and statistically significant correlation between motor function and oromotor function. The fact that motor control is globally-controlled and not limited to limbs or stem, should make us reflect and improve all areas related to CP, including the assessment protocols.

The prevalence of drinking or eating difficulties in CP has not been fully defined; it seems it could vary between 27-90% of cases [3]. We have noticed a significant correlation between consistencies handling dysfunction and worse nutritional states (poorer BMI and WI values) that has not been previously described in the existing scientific literature. Therefore, we can state that worse oral motor function is directly linked to severe GMFCS and MACS levels.

Besides, these children face another great problem, their inclusion in the society. Scientific evidence shows that children with pain and those with more severely impaired walking, fine motor skills, communication, and intellectual abilities have lower participation across most domains [6-8]. But problems with feeding and vision are associated with lower participation for specific domains too. The areas with less difficulties are home and school activities where there are better adaptations. Every comorbility associated to cerebral palsy is a new obstacle to their inclusion in the society. Feeding implies a significant social role with a significant association to motor level.

Conclusion

Feeding and swallowing disorders are frequent conditions in our environment that influences diet modification practices, mainly determined in all cases by oromotor dysfunction. Nevertheless, malnourishment incidence is not significant in development countries, although there´s a direct correlation with motor affection. Patients with severe motor function are the ones at highest risk, because they face the biggest difficulties with feeding and deglutition. Therefore, it is essential to carry out in such cases a suitable diagnostic and therapeutic plan to avoid nutritional risks and complications, as well as others, in order to favour adequate development of the child.

Children with cerebral palsy have lower participation than children in the general population and those with more severe impairments have lower participation. Feeding and deglutition

are comorbilities that influence in their social integration that we need to evaluate with caution.

Conflict of Interest

There isn't any conflict of interest exists

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