

Working on the diet of children with cleft lip and platinum

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ABSTRACT

Children with cleft lip and palate often suffer from nutritional deficiencies and subsequent growth problems, both of which are largely attributed to feeding difficulties due to the structural defect, as well as the numerous surgical procedures they undergo. The purpose of this review article is to assess the nutritional needs of these children and to emphasize the role of nutrition in their long-term growth and development, along with educating parents about nutrition and various alternative feeding practices as an important aspect in the treatment of cleft lip and palate that might otherwise go unnoticed. For this review, several articles on cleft lip and palate, ranging from plastic surgery journals to dental surgery journals, were studied, and more articles were based on subsequent literature reviews of the above. It was concluded that to achieve optimal health in these children, the dietary changes needed per day were minuscule. Rather, it is the method of delivery of breast milk or formula that often needs to be changed to reduce the effort and resulting caloric loss of the newborn, indirectly increasing caloric intake and the resulting weight gain and growth.

Keywords: Cleft, Lip, Feeding.

INTRODUCTION

Inadequate nutrition has been largely blamed for the growth problems of children with cleft lip and palate (GARATE et. al. 2020). Nutritional deficits can be attributed to the numerous surgeries they undergo and dietary challenges due to the oral defect that leads to insufficient nutrient intake. This, in turn, results in reduced growth rate, decreased healing of scars on the lips or palate, as well as tooth decay.

They are likely to lack macronutrients (energy, proteins, fats and carbohydrates) as well as micronutrients (calcium, iron, phosphorus) (SANTOS, 2017). Therefore, overcoming nutritional inadequacies and providing nutritional information to parents is critical in combating feeding problems and ensuring that their babies receive adequate nutrition.

The aim of this review article is to assess the nutritional needs of children with cleft lip and palate and to emphasize the role of nutrition in the long-term growth and development of these children, along with appropriate parental education on nutrition and diverse feeding practices as an important aspect in the treatment of cleft lip and palate that would otherwise be could go unnoticed.



LITERATURE REVIEW

CHILDREN'S NUTRITIONAL POINTS

As long as there are no other systemic abnormalities, a newborn born with a cleft has nutritional needs similar to those of newborns without a cleft. The fundamental concern of all newborns in the first months of life is to maintain an adequate food intake. This is regardless of whether they are normal or have any structural defects, such as cleft lip and palate (SANTOS, 2017). The outcome of future surgeries and specialized care for the baby may be compromised if it does not develop and thrive early.

Maintaining a sufficient food diet is a challenge in babies with clefts due to common feeding problems such as nasal regurgitation, ineffective sucking, frequent air intake and belching, and consequent longer feeding time. This is of paramount importance to build their immunity and allow for adequate weight gain so that they can tolerate the stress of surgical interventions and to speed up the healing process from there. The ingestion process, more than absolute nutritional changes, is the most important aspect that requires modification for newborns with cleft palate.

CHALLENGES OF FEEDING BABIES WITH CLEFTS

Breastfeeding babies with cleft lip and/or palate is fraught with controversy. Certain groups are sure that any baby can be breastfed properly, regardless of the type of cleft they have. The advantages of breast milk for babies have been well recognized (GARETE et. al. 2020). Breastfeeding indirectly has some protective action against otitis media in children, according to several studies. Similar protection has been documented in children with cleft palate.

Similar protection has been documented in children with cleft palate (GARATE et. al. 2020). One of the complicating elements that can occasionally reverse the efficiency of breast milk in protecting against otitis media is the function of the Eustachian tube, which is common in children with cleft palate. Because of this deficiency, babies with clefts are, in fact, more likely to get ear infections. However, the protection offered by breast milk to prevent ear infections cannot be overlooked and occupies an important place in the overall management of these children.

Babies with an isolated cleft lip can usually breastfeed if the breastfeeding position is adjusted so that the intact part of the socket and lip makes a good seal with the breast tissue. However, breastfeeding is a challenge for most newborns with cleft palate (including soft palate) and they need interventions for the same (ANDRADE et al. 2019). However, it is important to encourage mothers to breastfeed. However, unrealistic encouragement can lead to emotions of inadequacy and failure in the mother, if at a later stage of life additional bottles are recommended for poor growth. Therefore, a balanced approach is needed.

Babies' ability to cope with the different types of clefts varies, but simple changes can help them get enough nutrients to gain weight. Various treatments have been described and applied effectively by



surgeons and craniofacial institutions over the years. Several centers have proposed the creation and implementation of a feeding obturator to physically limit the continuity of the oral cavity with the nasal cavity (SANTOS, 2017).

According to Andrade et. al. (2019), the purpose of the obturator is to help the infant establish sufficient negative pressure to allow adequate sucking of breast milk or nipple, as well as to reduce regurgitation through the nasal cavity. It produces a firm platform for the baby to press on and get milk from the nipple. Feeding is facilitated and feeding time is considerably reduced, nasal regurgitation and gagging are minimized and the tongue is also prevented from entering the defect.

MODIFYING CHILDREN'S FEEDING PROCESS IN THE POST-SURGERY PERIOD

For a newborn with a cleft lip and/or palate, continuing to provide sufficient nutrition and perhaps changing feeding techniques are issues that need special attention after surgical closure of the defect. The child's dietary needs after surgery are similar to those of other surgical treatments (TRETTENE, 2018). But here, the method of delivering the milk/food is a source of concern since the surgery involves the oral cavity. Breastfeeding or bottle feeding is prohibited by some surgeons immediately after lip closure due to the potential for postoperative stress at the surgical site.

Saints et. al. (2018) compared infants who immediately started breastfeeding or breastfeeding after lip repair surgeries with their peers who were kept tube-fed and syringe-fed for 7–10 days postoperatively. These researchers found that postoperative breastfeeding or bottle feeding, if done with proper care, was safe and that no major changes in feeding techniques were necessary.

Skupien et. al. (2016) conducted a survey of 92 cleft palate teams to see how they handled nutritional and surgical instructions before and after surgery for primary cleft palate closure. Most of the centers did not specify any dietary adjustments, according to the 49 surveys returned. Many facilities, on the other hand, had certain rules for postoperative feeding techniques (e.g., cup/spoon/syringe feeding, feeding only purees or liquids, etc.), and some even indicated that specific foods, such as citrus fruits or sticky foods, should be avoided for a certain amount of time.

CONCLUSION

The growth and development of a child with a cleft lip or palate needs a lot of attention, especially during the growing years, through good nutrition, feeding practices, and hygiene. To achieve optimal health in children with cleft lip and palate, it is critical to implement appropriate nutritional interventions as well as educate caregivers. Usually, only minor dietary changes are needed.

Rather, it is the method of delivering breast milk or formula that often needs to be changed to reduce the effort and resulting calorie loss of the newborn by indirectly increasing the calories consumed



to help with weight gain and growth. The goal is to provide the newborn with enough calories before and after any surgical intervention so that they can recover and grow.



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