Trabalhos Científicos

Título: Orofacial Myofunctional Disorder In Infants With Zika-Associated Microcephaly

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Resumo: Introduction:Children with congenital Zikavirus syndrome (CZS) may have a high risk of orofacial myofunctional disorders (OMD), especially after the fourth month of life, when they are transitioning from reflex to voluntary swallowing. However, the clinical complications of OMD have not been studied in these children. Objective:To evaluate the prevalence of OMD in children with CZS and determine the predictors of enteral nutrition or respiratory tract infection (RTI). Methods:Hospital-based cohort of babies born during the Zikavirus outbreak. We identified CZS by head circumference at birth less than 2 standard deviations below Intergrowth standard, excluding other TORCH infections by serological assays. Two independent speech therapists evaluated anatomical structures for OMD both before and during nutrition. Children were followed for three main clinical outcomes: use of antibiotics or hospital admission for RTI; and indication for enteral nutrition. We constructed Kaplan Meier curves for each outcomeof RTI or enteral nutrition and selected variables associated with each outcome by a log-rank p-value < 0.2. Backward selection using multivariable Cox regression was then performed including each of these variables for the combined outcome of RTI or enteral nutrition.Results:We evaluated 77 children, mean age 8.6 (+/-5.4) months. We detected OMD in the following anatomical structures: tongue in 57 (74%), lips in 43 (56%), buccinators in 44 (57%). Concordance rates for each anatomical structure for both speech therapists were excellent (kappa=0,67 to 1.0, p<0.001). Dysphagia was detected in 32 (42%) children: 28 (36%) for liquid consistency, 1 (1%) for solid and 3 (3.9%) global (both consistencies). After a mean 16.5 (+/-7.4) months of follow-up, 9 (11.7%) required enteral nutrition, 25 (32.5%) required antibiotics for RTI and 22 (28.6%) were admitted due to RTI. Combined outcome occurred in 27 (35%) children. In multivariable analysis, predictors of the combined outcome were: head circumference percentile at birth (OR=0.82 per Z-score increase; 95% CI=0.70-0.97, p=0.016) and type of dysphagia (global vs absentOR=5.18; 95% CI=1.01-26.62, p=0.049).Conclusions: Children with CZS frequently present with OMD. Those with more severe microcephaly or with early dysphagia for more than one type of consistency are at high risk for RTI or enteral nutrition.