

MAXILLARY LABIAL FRENUM IN PRESCHOOL CHILDREN: VARIATIONS, ANOMALIES AND ASSOCIATED FACTORS

Lívia Mund de Amorim¹, Nilton de Moura Alves¹, Elisa Maria Rosa de Barros Coelho¹, Aveline Ribeiro de Freitas¹

Paulo Floriani Kramer^{1,2}

1 Department of Pediatric Dentistry, School of Dentistry. Lutheran University of Brazil, Canoas, Rio Grande do Sul, Brazil.

2 Department of Pediatric Dentistry, School of Dentistry. Pontifical Catholic University of Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, Brazil.

Introduction: Only a few epidemiological studies have described morphological types and variations in the attachment of the maxillary labial frenum (MLF) in preschool children.

Objective: The aim was to investigate the prevalence of morphological and attachment variations of MLF and associated factors in preschool children.

Study design: A cross-sectional study was conducted with 1,313 children aged between zero and five years attending public nurseries in the city of Canoas, Brazil. Data were collected through a questionnaire addressing demographic, socioeconomic, and behavioral characteristics and clinical examination of the MLF. Assessments of MLF morphology and attachment were based on the classification systems proposed by Sewerin and Mirko, respectively.

Results

Table 3. Prevalence ratios (PR) and respective 95% confidence intervals (CI) in analysis of factors associated with morphology of maxillary labial frenum.

Variable	Unadjusted			Adjusted*		
	PR	95% CI	p	PR	95% CI	p
Sex			0.001			0.003
Male	1.00			1.00		
Female	1.40	(1.14-1.73)		1.34	(1.10-1.64)	
Age			<0.000			<0.001
0-1 years	1.00			1.00		
2-3 years	0.35	(0.28-0.43)		0.36	(0.29-0.44)	
4-5 years	0.23	(0.18-0.30)		0.24	(0.19-0.31)	
Ethnicity			0.177			0.227
White	1.17	(0.93-1.46)		1.14	(0.92-1.42)	
Nonwhite	1.00			1.00		
Mother's education			0.630			0.286
≤ 8 years	0.95	(0.76-1.17)		1.13	(0.90-1.41)	
> 8 years	1.00			1.00		
Family income			0.033			0.053
< 1.5 x BMMW	0.76	(0.59-0.97)		0.76	(0.60-1.00)	
1.5 – 2.0 x BMMW	0.83	(0.64-1.08)		0.81	(0.63-1.03)	
> 2.0 x BMMW	1.00			1.0		
Breastfeeding			0.008			0.681
Yes	1.00			1.00		
No	1.35	(1.08-1.70)		1.05	(0.83-1.32)	
Pacifier Use			0.025			0.063
Yes	1.31	(1.03-1.66)		1.28	(0.99-1.66)	
No	1.00			1.00		
Baby Bottle			0.805			0.183
Yes	1.05	(0.71-1.54)		0.76	(0.50-1.14)	
No	1.00			1.00		

Table 4. Prevalence ratios (PR) and respective 95% confidence intervals (CI) in analysis of factors associated with attachment of maxillary labial frenum.

Variable	Unadjusted			Adjusted *		
	PR	95% CI	p	PR	95% CI	p
Sex			<0.001			<0.001
Male	1.00			1.00		
Female	1.47	(1.22-1.77)		1.39	(1.17-1.65)	
Age			<0.001			<0.001
0-1 years	1.00			1.00		
2-3 years	0.41	(0.34-0.49)		0.42	(0.36-0.50)	
4-5 years	0.18	(0.14-0.23)		0.19	(0.14-0.24)	
Ethnicity			0.005			0.005
White	1.35	(1.09-1.67)		1.33	(1.09-1.63)	
Nonwhite	1.00			1.00		
Mother's education			0.815			0.274
≤ 8 years	0.98	(0.80-1.19)		1.11	(0.92-1.35)	
> 8 years	1.00			1.00		
Family income			0.083			0.217
< 1.5 x BMMW	0.82	(0.65-1.02)		0.87	(0.69-1.09)	
1.5 – 2.0 x BMMW	0.93	(0.74-1.17)		0.93	(0.76-1.15)	
> 2.0 x BMMW	1.00			1.00		
Breastfeeding			0.005			0.827
Yes	1.00			1.00		
No	1.34	(1.09-1.64)		1.02	(0.84-1.24)	
Pacifier Use			<0.001			0.007
Yes	1.50	(1.20-1.88)		1.38	(1.09-1.73)	
No	1.00			1.00		
Baby Bottle			0.243			0.357
Yes	1.25	(0.85-1.84)		0.83	(0.56-1.23)	
No	1.00			1.00		

Conclusion: Demographic and behavioral characteristics were associated with MLF morphology and attachment. The reduction in the prevalence of the outcomes with the increase in age suggests that surgical interventions in the first years of life may constitute overtreatment.

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