

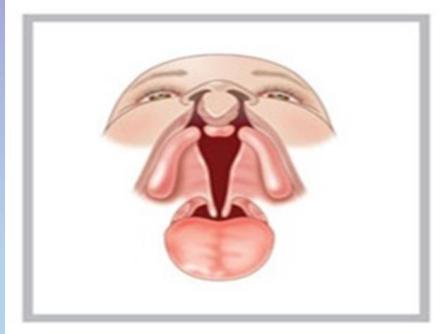
The Impact of Early Two-Stage Lip Repair on Speech Outcomes in Bilateral Cleft Lip and Palate

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Introduction

Preyer et al concluded that children with complete bilateral cleft lip and palate (BCLP) who underwent a two-stage lip repair achieved significantly inferior speech outcomes than those who underwent a one-stage repair.

We theorise these results were likely as a consequence of second stage of the repair being carried out years after the first, when the child has already begun development of speech.



Aims of Study

Our practice is to carry out each stage at 3 months and 7 months respectively and hypothesise these earlier timings for two-stage intervention will have a positive effect on speech outcomes.

Methods

- Retrospective case note investigation (2004 – 2020)
- Twenty-eight children identified with complete BCLP
- Two stage repair:
 - Lip adhesion: 3.0 months (range 1-7 months)
 - Definitive lip repair: 7.3months (range 5-12 months)
- Measuring bilabial consonant production at:
 - 18 months
 - 36 months
 - 5 years
- Measuring Cleft Speech Characteristics (CSC's) at 5 years.

Results

		Green	Amber	Red
Original Paper	One stage repair	50%	35%	15%
	Two stage repair	12.5%	19%	69%
Our Data	Non-syndromic (n=28)	50%	27%	23%
	Non-syndromic with post 5 year surgery excluded (n=19)	72%	11%	17%
	Syndromes (n=7)	25%	50%	25%

Table 1: Cleft Speech Characteristics (CSC's) demonstrated at age 5

Results



Graph 1: Bilabial Consonant Production

Conclusion

- Earlier two-stage repair resulted in increased frequency of bilabial production at early ages.
- Largely equivocal results at age 5, when all surgery has taken place.
- CSC's demonstrated greater incidence in early two-stage repair compared to both delayed two-stage group and one-stage repair group.
- **Timings of surgical intervention, as well as surgical protocol followed affect the speech outcomes in children with BCLP.**

References

- Peryer H, Slator R, Thomson J, Richard B. The Method of Surgical Lip Repair Affects Speech Outcomes in Children With Bilateral Cleft Lip and Palate. Cleft Palate Craniofac J. 2020 Sep 22;1055665620956872. doi: 10.1177/1055665620956872. Epub ahead of print. PMID: 32959681.