



Newborn Misshapen Ears: Improving Early Identification for Non-surgical Interventions

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Abstract

Successful non-surgical correction of newborn misshapen ears depends on timely referral for early initiation of interventions. Early correction has the potential to prevent more costly future otoplasty surgeries and prevent childhood bullying.

In the years prior to our study, few referrals were made to the Otolaryngology department regarding congenitally misshapen ears. To increase early referrals, an educational presentation was given to the pediatrics providers at our institution. The objective of our project was to see if our educational series with pediatrics providers increased early referrals for childhood ear deformities amenable to molding.

Referral patterns were retroactively analyzed comparing the period before and following the educational in-service. During the two years preceding our intervention, only 6 patients were identified for as candidates for non-surgical intervention. In the nine months following the intervention 19 such candidates were identified. We concluded our educational in-service had achieved the goal of increasing the number and quality of referrals for congenitally misshapen ears.

Methodology & Materials

An educational presentation was given to pediatric providers of newborns at our medical center. The lecture focused on specific attention to the ear when performing a newborn physical and cases that would merit early referral to the otolaryngology department prior to discharge from the nursery.

Charts were individually reviewed by the primary author for ICD codes in the Q series 17.2-17.9 for newborns within the first months of life referred for ear molding, physical exam findings, and whether intervention was completed. A retrospective analysis was then carried out looking at referral patterns prior to the educational presentation and afterwards

Results

- Our search yielded a total of 81 encounters over the period of interest.
- After screening for duplicate patients, a total of 53 patients were identified.
- 29 patients were seen prior to the intervention. Review demonstrates 6 patients meeting criteria for ear molding over the 17 month period evaluated prior to our intervention.
- After the lecture 24 patients were identified with referrals for auricular abnormalities.
- 19 met indications for ear molding over this 9 month period.

Conclusions

Our findings demonstrate a 6-fold increase in referrals from primary care providers for newborn misshapen ears following the in-service lecture when accounting for the periods of time surveyed. Furthermore, of the patients referred, higher number of patients were deemed to be candidates for non-surgical ear molding.

This demonstrates that education of primary care providers is a reasonable approach to more quantitatively and qualitatively increase referrals of newborns with misshapen ears that are amenable to intervention. This has the potential to reduce lost economic potential associated with bullying and surgical cost of otoplasty.

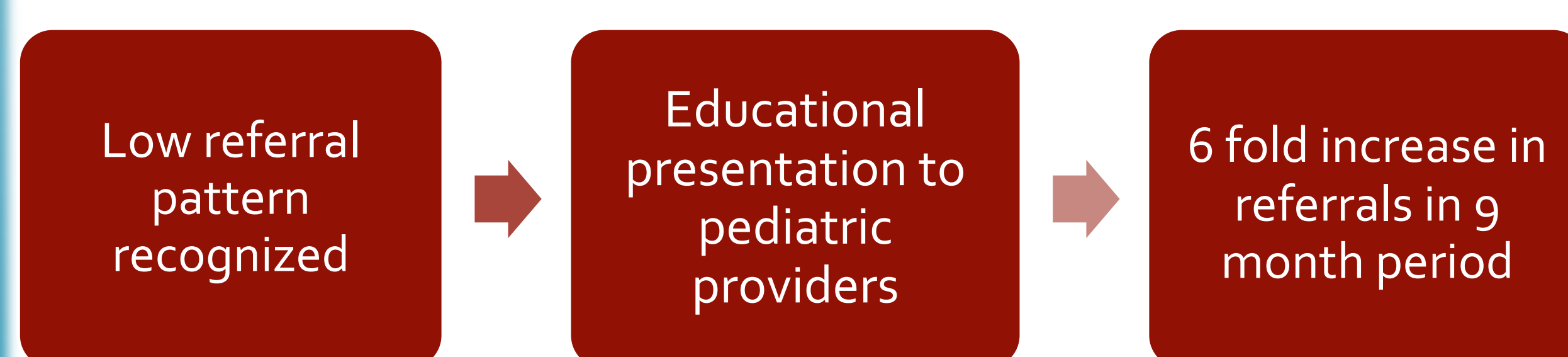


Figure 1. Summary of study



Figure 2. Before and after photo of infant treated with non-surgical ear molding. Credit: Jeffery Teixeira, MD²

Disclaimer

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2. The investigators have adhered to the policies for protection of human subjects as prescribed in 45 CFR 46.