The relationship between age of initiation of non-surgical ear molding and regression rate of congenital ear deformities

Purpose: After 3 weeks of age, studies show ear molding to be unsuccessful due to increased regression rates. Studies have not differentiated success rates based on regression severity; partial regressions may be deemed successful and satisfactory by parents. We examined successful ear molding at different ages of presentation by measuring regression severity and parental satisfaction.

Methods: Patients who presented to [BLINDED FOR REVIEW] for ear molding from January 2017 to October 2018 were eligible for inclusion. Molds were applied on the initial visit and monitored biweekly. Treatment length was based on age, deformity type and severity. One month after treatment completion, parents completed a satisfaction survey where they assessed regression on a three-point severity scale.

Results: 165 patients were included in this study. 67 were less than three weeks of age and had an overall correction rate of 95%. The complete correction rate was 80% and only 5% saw complete regression. In the remaining 98, the overall correction rate was 94%, with a 63% complete correction rate. Only 6% percent saw complete regression. There was no statistical significance in parental satisfaction, perceived improvement, or likelihood to recommend ear molding between age groups.

Conclusions: Regression rates are higher in children older than three weeks although not statistically significant. Most regressions were partial and ear molding still significantly corrected most deformities. We suggest that ear molding be offered past three weeks of age, with maximum age being dependent on deformity type, as it still leads to high parental satisfaction.