THE IMPACT OF FACIAL MALFORMATIONS ON VISUAL ATTENTION TO INFANT FACES

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ABSTRACT

Infant faces have been shown to readily capture adult visual attention, likely due to their importance evolutionarily in facilitating bonds with caregivers and allocation of parental resources. Cues of low health are associated with a lower degree of parental attention and care and the presence of facial malformations, such as cleft lip/palate, negatively impact early interactions between children and their caregivers. However, it remains unclear how such facial malformations may impact early visual attention and processing. The current study used eye tracking to investigate adults’ visual attention to infant faces with cleft lip/palate as compared to unaffected infant faces (study 1) and the impact of palate repair surgery on visual attention (study 2). The mouth region of infant faces was found to capture and hold visual attention to a greater degree for infants with cleft lip/palate compared to unaffected infants, at the expense of visual attention to the eyes. Similarly, visual attention was captured and held by the mouth region for infants before palate repair surgery compared to after palate repair surgery. These results demonstrate a significant decrease in early visual attention to the eye region for infants with cleft palate, while increased visual attention is registered on the mouth region and further suggest that palate repair surgery may restore more normative visual attention. These processing differences may contribute to several important aspects of development (e.g., joint attention) and may play a vital role in the previously observed difficulties in mother-infant interactions.