Cleft of The Nasal Ala Case Report

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Introduction

A cleft of the nasal ala without any associated cleft of the lip or palate is a rare congenital anomaly. We were able to find only about six cases reported in the literature (1, 2). These clefts, also called colobomas or fissures of the ala, fall into Group IV in the Kernahan and Stark classification (4). They are frequently associated with central nervous system malformations proportional in severity to that of the cleft.

The abnormality is thought to be caused by unknown exogenous factors and has not been described as hereditary.

The embryologic explanation for this defect, according to the classical theory of Dursy and His (3), is an incomplete fusion of the nasomedial and nasolateral processes. Stark (5) would probably attribute it to a deficiency in mesodermal reinforcement.

This type of cleft has been repaired in the past by a composite graft from an ear or, in the case of a larger defect, even by a Tagliacozzian arm flap. We have employed another method of repair using only local tissue. This has the advantages of better color match and elimination of donor site scarring.

Case report

A three-month-old Mexican-American male was brought to our clinic with a cleft of the right nasal ala (Figure 1). The lip and palate were normal, and there were no other detectable abnormalities. The baby had been the product of a full-term uncomplicated pregnancy, and there was no family history of clefts or other medical problems.

The cleft was surgically closed when the baby was four months old by freshening the edges and then making a full-thickness incision from the apex of the cleft laterally, parallel to the alar edge. A laterally-based flap was thus formed. The flap was advanced medially and sutured to the medial edge of the cleft. The alar cartilage, completely divided, was not repaired. Only minimal dissection was done in order to prevent injury to the cartilage.

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Post-operatively, the nose is healing uneventfully. Figure 2 shows that there is some residual notching of the ala which is relatively minor and may disappear with scar maturation and growth. If secondary correction ever becomes necessary, it would probably not be warranted until the child is much older when it could be done with only local anesthesia.

Summary

This is a case report of an infant with a congenital cleft of a nasal ala for which a new method of surgical repair is presented.

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