Thick vermilion due to scar tissue after cleft lip surgery thins markedly over time

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[Purpose] After primary repair of unilateral cleft lip, the vermilion on the suture line often thickens and bulges during early childhood. We showed previously that the bulging was due to postoperative scar tissue. However, how the vermilion changes over time from primary repair through to the end of child growth is poorly understood. To address this, the present study was performed.
[Methods] Consecutive patients with unilateral cleft lip who underwent primary lip repair in 1996¬–2004 and were followed up until 18 years of age were identified by retrospective chart review. Photographs taken at 1 year of age, 5 years of age (before revision surgery), 10 years of age, and at the end of child growth were assessed and the shape of the vermilion was graded as nodular, flat, or recessed.
[Results] Of the 48 patients, 23 and 25 were cases of complete and incomplete cleft, respectively. At the age of 1 year, the vermilion was nodular in 58%, flat in 15%, and recessed in 27%. At 18 years of age, these percentages changed to 4%, 21%, and 75%, respectively. At that stage, most complete cleft cases exhibited recessed vermilion on the suture line and recessed vermilion was seen on the midline in 40% of the incomplete cleft cases.
[Conclusion] Since operative scar tissue matures slowly, the surgical outcomes with regard to the shape of the vermilion should be followed until the end of growth.