MICROSURGICAL TREATMENT FOR DUPLICATED HALLUX

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Duplicated hallux is a rare congenital deformity sometimes untreated because it can be hidden in the shoe. The deformity varies from case to case, each requiring careful consideration before operation. We report a case treated by a new microsurgical procedure.

Case report. An 18-month-old boy had bilateral congenital duplication of the hallux (Fig. 1). The normal-looking tibial halluces were immobile, while the fibular halluces moved, but were hypoplastic.

The right side was treated by the microsurgical transfer of an onychocutaneous graft. The tibial hallux was amputated and degloved to make a neurovascular island flap innervated by the fibular neurovascular bundle (Fig. 2). Great care was taken to preserve the nail matrix by subperiosteal peeling when the flap was separated from the phalanx. The skin of the fibular hallux was dissected away, preserving the phalanx and the tendons. The flap from the tibial hallux was then wrapped around the fibular phalanx. Fifteen months later, the great toe shows a good functional and cosmetic result (Fig. 3), and has protective sensation.

The left side was treated one month later, but the parents requested that the fibular hallux should be preserved, and we could not therefore use the same method. A neurovascular island flap without the nail was raised from the fibular side of the tibial hallux and transferred to the fibular side of the fibular hallux. Fourteen months later, the flap protrudes and the appearance is less satisfactory (Fig. 4). The parents regret their decision.

Discussion. It is difficult to correct a duplicated hallux and preserve the function and appearance of the remaining great toe. In our case, one duplicated toe functioned normally, and the other was floating but had normal shape. The best management in these circumstances would seem to be our microsurgical technique providing a modified wrap-around flap.

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