Bilobe Flap For Web Reconstruction in Adult Syndactyly Release: A new Technique Which Can Avoid The Use of Skin Graft

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INTRODUCTION: Traditional surgical approaches to syndactyly repair have used flaps from the dorsum of the involved fingers and dorsal and palmar interdigitating flaps (1). However, these flaps are dependent upon skin from syndactylic fingers already insufficient in the surface area. This study describes the use of a bilobed flap for formation of web spaces in the treatment of syndactyly release, which decreases the graft need and also avoids the use of skin grafting in syndactyly release and in web reconstruction cases. The present technique was developed based on a concept for the beneficial use of the dorsal hand skin by lowering or eliminating the need for a skin graft.

MATERIALS and METHODS: A retrospective review of this procedure was performed. Patients were aged 20 to 23 years. The mean follow-up period was 7 ± 3.2 months. The bilobed flap was designed for web formation on the dorsal skin of the proximal phalanx and dorsal skin of the hand. We present 10 patients, of which there were 15 web space syndactyly repairs with a bilobed flap.

RESULTS: Surgery was completed without skin grafting in nine cases of 14 web spaces; two of them were complex/complete, and two of them were simple/complete syndactylies. We used a skin graft in one patient because of triangular flap necrosis in a second operation. The use of a bilobed flap allowed the construction of web spaces, providing satisfactory cosmetic outcomes (**figure 1 - 2**). No partial necrosis or complications were observed in bilobed flaps. Operation time is shorter than the classical technique which needs to use a skin graft. Also, it is possible to reconstruct multiple webs in the same patient with this flap.

CONCLUSION: The present surgical technique could be a new surgical option for web formation and reconstruction in primary and secondary syndactyly cases. Thus, you may be able to avoid problems related to the skin graft.

REFERENCES:

1. Van der Biezen JJ, Bloem JJ. Dividing the fingers in congenital syndactyly release: a review of more than 200 years of surgical treatment. Ann Plast Surg. 1994 Aug;33(2):225-30.

FIGURE LEGEND:

Figure 1: Bilateral 3rd and 4th web syndactylies. Preoperative view.

Figure 2: Post-operative 8-month views of the patient. No skin graft was used for any of the webs.

Figure 1:

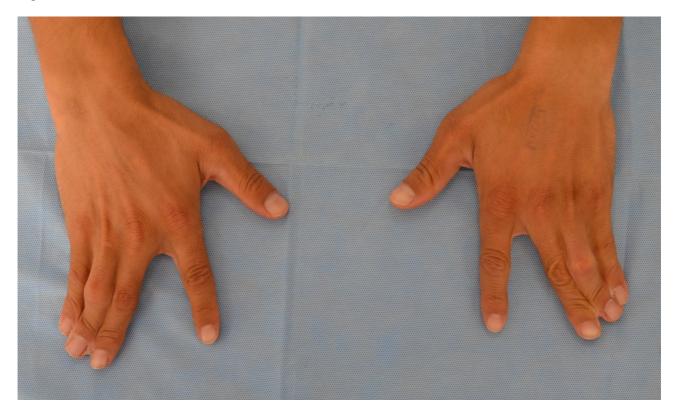


Figure 2:

