Re: End-of-skin grafts in syndactyly release: description of a new flap for web space resurfacing and primary closure of finger defects

Kresimir Bulic

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Sir,

I read with great interest the article “End-of-skin grafts in syndactyly release; description of a new flap for web space resurfacing and primary closure of finger defects” by Sharma et al. published in *Hand* in 2009 [7]. The method of using an islanded dorsal flap without additional skin grafts for syndactyly release was first described by Sherif et al. in 1998 [8], being subsequently reported and modified by many authors [1, 3, 5, 9, 11]. While they all agree that this method of web space reconstruction provides an excellent basis for a long-lasting good result, most of them also admit that it is not suitable for all syndactyly types, and that releasing complete and complex syndactylies most often still requires the use of skin grafts and local flaps [3, 5, 9, 11].

The authors described a method of closing the middle and distal phalangeal defects that result from syndactyly release through direct closure or secondary intention healing following defatting of skin flaps. This technique produces a linear scar in the mid-lateral line of the digit, which will, with time, lead to contracture and finger and nail deformity. Although the authors reported one patient in their series having had complex syndactyly, they did not report any additional procedures performed to reconstruct the fingertip in this patient.

The reconstruction of the lateral nail fold in complex syndactyly release usually requires some form of pulp flap method to cover exposed bone, of which the technique described by Buck-Gramcko is probably the best known [2]. Previously used methods of nail plate, matrix and pulp fat reduction to achieve the direct closure have failed the test of time, very often resulting in cosmetically unacceptable fingertips with deformed nails and absent or deformed lateral nail folds [4]. Indeed, taking a closer look at the follow-up photograph of one of the released digits in the article (Fig. 1), it is clearly visible that there is extensive scarring and notching of the lateral nail fold and deformation of the nail plate, which the authors did not consider as a problem.

Considering the relatively small number of patients reported, various syndactyly types included in the study group and relatively short follow-up time, it is difficult to accept conclusions about the long-term outcomes. Unfortunately the authors also failed to quantify their results using parameters traditionally used in syndactyly release outcome reports [6], such as joint ROM, web creep, as described by Withey [10], and scar evaluation by the Vancouver Scar Scale or some other scar score. A normal sensation is reported, although it is admitted that sensory testing can be challenging in this age group (10 months to 3 years plus 1–3 years follow-up).

Although many reports provide ample evidence that dorsal island flap techniques can provide long-lasting good result in incomplete syndactylies, thus avoiding the need to use skin grafts and shortening the operation time, complete and especially complex syndactylies necessitate the use of

K. Bulic (✉)
Department of Plastic Surgery, University Hospital Zagreb,
Kispaticeva 12,
10000 Zagreb, Croatia
e-mail: kbulic@kbc-zagreb.hr

Fig. 1 Close-up of the follow-up photographs of one of the released digits (with kind permission from Springer Science+Business Media [7])

skin grafts and local flaps if a cosmetically pleasing fingertip is to be achieved.

Conflict of interests statement I declare that I have no conflicts of interest, commercial associations or intent of financial gain regarding this research.

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