

Abstract

Background: Skin-only avulsion is a particular type of avulsion surgery. In this type of injury, tendons, bones, and joints maintain their integrity. In this report, we aimed to report the promising results of replantation in seven fingers with total skin-only avulsions.

Methods: From 2007 to 2015, 6 patients with a mean age of 34.6 (20–52) who underwent replantation surgery for total skin-only avulsion injuries distal to metacarpophalangeal (MP) joint were evaluated according to the injury type, etiology, level of repair, and the repaired structures.

Results: Seven fingers of 6 patients were evaluated. The mean repaired artery and vein number were 1.5 (1–2) and 3.8 (3–5), respectively. The mean percentage of partial necrosis in the three fingers and an amputated finger was 25.70%. Three fingers survived completely, whereas three developed partial necrosis which were managed by debridement and full thickness skin grafting. Mean static and dynamic two-point discriminations were 6 mm and 3.83 mm, respectively. The mean ROM degree of PIP/IP joints and DIP joints was 74.1 (60–85) and 56.6 (40–70) degrees, respectively. The mean follow-up was 28.3 months (24–36).

Conclusions Skin-only avulsions are a particular type of avulsion injury and very challenging to treat. In order to avoid from the partial necrosis due to the vascular deprivation of perforating branches of the proper digital artery, we recommend repairing both arteries in this type of avulsion. Skin-only replantation results can be successful when several technical details are observed. Level of evidence: Level V, therapeutic study.

Keywords: Amputation . Avulsion . Replantation . Skin-only

[Yayına ulaşmak için tıklayın -Replantation of the total skin-only avulsions of fingers](#)

