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### Case Report

# The use of pedicled abdominal flaps for coverage of acute bilateral circumferential degloving injuries of the hand

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#### ABSTRACT

Reconstruction of bilateral soft tissue defects in hand and distal third of the forearm, is a challenge for any reconstructive surgeon. When there is circumferential skin loss affecting the whole hand and fingers as in major degloving injuries, the extent of tissue required for reconstruction narrows down the choice of flaps. When the injury affects both hands the magnitude of the problem becomes compounded. There is no report in the literature of free skin flaps to cover circumferential degloving injuries in both hands. We are presenting the technical considerations and outcome of pedicled abdominal flaps used for immediate coverage of circumferential degloving injuries of both hands.

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### Introduction

Circumferential degloving injury of the entire hand is a rare entity [1]. It leaves large raw area that needs to be covered with flap dimensions exceeding 25 to 30 cm on one side and a total area of at least 600 cm<sup>2</sup>. When the thumb also needs cover, the flap requirement becomes excessive. The thumb will require a different flap because it has to be oriented in a different plane from the rest of the hand. The task becomes much more challenging when there is bilateral degloving injury with skin loss. Few solutions have been presented in the literature for bilateral hand defects. Although there is not systematic approach for upper limb reconstruction, free flaps are considered to be the first option [2,3]; a wide variety of free flaps has been described [4], being the adipofascial flaps the most common option. Some bilateral hand defects have been successfully covered

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