OUTCOMES OF THE TREATMENT OF HAND DEGLOVING INJURIES WITH GREATER OMENTUM FLAPS

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BACKGROUND
• Degloving injury consists in tearing out the soft-tissue integument from skeleton of the hand, with accompanied nerves and vessels.
• The whole hand degloving has bad reputation and one of worst prognosis, even worse than total hand amputation.
• The range of possible salvage procedures in these cases is limited and their outcomes are unsatisfactory. One of the suitable methods is wrapping the skinned hand with pedicled or free greater omentum flap, retrieved from the abdominal cavity.

OBJECTIVE
We report outcomes of the treatment of 5 patients at a mean of 8 years after total degloving of their hands and coverage with omental flaps.

RESULTS
• All flaps healed uneventfully, but in none of the patients the whole length of the fingers was preserved.
• Division of stumps of 3 fingers was possible in one patient, two others had three-digital hands and remaining two had only separated thumb.
• Dexterity of injured hands was limited with a mean of score DASH questionnaire of 43 points. Quality of life as measured by SF-36 questionnaire was fair (58 and 53 points in physical and mental domain, respectively).
• Regardless this, all patients were satisfied with achieved outcomes and all returned to work, which was a confirmation of the effectiveness of the method used in their treatment.

Pic. 1 Initial degloving injury
Pic. 2 Necrosis of the degloved skin after reattachment
Pic. 3 Necrectomy
Pic. 4 Great omentum pedicled flap
Pic. 5 Coverage of the injured hand with the omental flap
Pic. 6 Meshed split skin grafts placed after detachment of the flap pedicle
Pic. 7 All fingers separated, px2 and px3 of involved fingers lost
Pic. 8 „3 finger hand”
Pic. 9 „2 finger hand”