

had reached to a point 10 cm up to 15 cm distal to the olecranon without significant elongation of the pedicle. 2 (40%) cases developed marginal distal necrosis of about 5 cm, being carried out necrectomy and skin grafting. In 4 (80%) cases migration paths were sutured during first surgical stage and in 1 (20%) cases – at second surgical stage, using skin grafts. No complications at donor site were reported.

**Conclusions:** This study revealed that latissimus dorsi pedicle flap can be used to cover large skin defects localized on thoracic limb's level, down to the proximal third of the forearm. It can be used up to 60% of the LD surface to cover the defects, without compromising the function of the shoulder. Migration distal from olecranon is not always safe, being accompanied by complications such as marginal necrosis.

**Keywords:** latissimus dorsi flap, migration, limits.

## RECONSTRUCTION OF SOFT TISSUE LOSS IN OPEN FRACTURE OF LOWER LIMB – CASE REPORT



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**Purpose:** to report a clinical case of open fracture of leg with tissues defect treated ortho-plastic and to analyze final outcome with regards to time taken for union and complications.

**Clinical case:** this paper reflects one clinical case of a man of 35 years old, smoker, admitted in Emergency Department with Gustilo Anderson type IIIA open fracture in medio-distal 3rd of right calf's both bones with pilon fracture and soft tissues damage AO IO2. In acute stage was performed debridement, fracture fixation in external fixator and reconstruction with posterior tibial artery distal perforator flap. The donor area was covered in second stage with a split thickness skin graft harvested from the thigh. Within 4 days was performed open reduction and pilon's internal fixation with screws. The flap was monitored hourly during first 24 hours, every 4 hours for the next 48 hours and every 8 hours for the next 72 hours. At 7 days postoperative was determined skin graft's infection with its partial loss, being performed debridement and repeated skin grafting. After the immobilization period, that was for a total of 2 weeks, followed by offloading of 1 week, the patient started to walk using a fracture boot, being discharged for ambulatory treatment. After the 5th month, patient started a full weight bearing status without any assistant devices. At 2 months follow-up was determined fistular tibial osteitis, flap's oedema, being underwent sequester-necrectomy and complex conservative treatment. At 5 months follow-up was determined acceptable primary union and satisfactory flap's integration with good aesthetic appearance.

**Conclusion:** Open fracture of leg's bones which needs flap coverage should be treated with high priority of radical early debridement, rigid fixation, and early flap coverage. A majority of these wounds can be satisfactorily covered with local or regional flaps.

**Keywords:** Open fracture tibia, nonmicrovascular flap, regional flap

## THE TREATMENT OF POST-BURN SCARS AND CONTRACTURES AT THE LOCOMOTORUM



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### INTRODUCTION

Historically, survival was the only gauge of success in managing those with serious burns. Survival is no doubt the immediate concern; it is the restoration to pre-injury status, and social return becomes important for the victim and the treating team. An extensive burn is the most devastating injury a person can sustain and yet hope to survive. More recently, the overriding objective of all aspects of burn care has become the reintegration of the patient into his or her home and community. This objective has extended the traditional role of the burn care team to well beyond completion of acute wound closure. The 3 broad aspects of this effort are rehabilitation, reconstruction, and reintegration.

### MATERIALS AND METHODS

Different principles of the surgical treatment were implemented in the practical activity thorough various plastic methods. The research includes a lot consisting of 386 patients with post-burn sequels in the locomotors system. Patients were divided into 3 groups according to the location of their lesions: upper limb and axillary region (n=192); trunk and neck (n=88); lower limb and perineum (n=106).

**RESULTS**

Various surgical procedures were applied:

Excision and plasty through advancement-53 (13,7%) cases;

Excision and plasty with expanded flaps-102 (26,4%) cases;

Incision or scar excision and grafting-93 (24,1%) cases;

Excision and plasty by rearrangement-89 (23,1%) cases;

Excision and combined plasty-32 (8,3%)cases;

Vascularized flap plasty method-17 (5,9%)cases.

**CONCLUSION**

According to our data scarring sequelae of post-combustion limited locomotor function in 56,3% cases, involving predominately the upper limbs (48,3%). Data from the study show that the post-combustion surgical rehabilitation of scarring sequelae of locomotor medical biological process is difficult, with gradual improvement in 47,9 % of cases. Surgical treatment has ensured both the functional and aesthetic recovery.

**KEYWORDS:** Burns; post-burn contractures; post-burn scars;

## TRAUMA OF LOWER LIMB ASSOCIATED WITH SCIATIC NERVE INJURY – MANAGEMENT PARTICULARITIES



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**The aim** of this study is to identify and detail posttraumatic and postoperative neuropathies.

**Material and Methods:** We identified 11 patients diagnosed with the posttraumatic sciatic nerve palsy, including postoperative one. We examined clinical data, trauma's information, surgery, symptoms and medical records.

**Results and discussions:** From the group of patients involved in the study 9 patients were men. Patients age ranged from 21 to 63 years old. We determined that 5 cases were during trauma or after surgery, and in 6 cases – at distance. Our data find their confirmation in literature data published by the authors: Farrell CM, Springer BD, Haidukewych GJ, Morrey BF.

**Conclusion:** Knowing the complications allows finding the preventive measures that are targeted towards monitoring the intraoperative neurophysiological complex depending on performed procedure.

**Keywords:** sciatic, neuropathy, posttraumatic, surgery.

## EFFECTIVE METHOD OF TREATMENT OF TISSULAR DEFECTS IN CALCANEAL AREA. CASE REPORT.



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**Introduction:** Infected tissue defects associated with impaired skeletal always presented treatment difficulties. Any new reconstructive technique aimed at reconstruction of these defects is welcome.

**Purpose:** The aim was to describe a new reconstructive technique which proved to be effective in the treatment of septic tissular defects of calcaneal area associated with Achilles injury.

**Material and methods:** The new type of perforator flap was for the first time used in a male patient, 20 years old admitted in the Septic and Reconstructive Surgery Department with a septic defect in the calcaneal area. The defect resulted from a car crash after avulsion of calcaneal tuberosity and injury of the Achilles tendon. The visible size of defects was 6x4 cm. Previously, in the patient was performed primary surgical debridement without bone and tendon stabilization. Three weeks after trauma in the patient was performed secondary debridement of necrotic tissues and reconstruction with tibial posterior corticoperiosteocutaneous perforator flap harvested by propeller techniques. Flap size was 25x5 cm. Bone graft incorporated in the flap was 4x1 cm. After rotation to 180°, the bone graft was fixed with a screw to calcaneus and the Achilles tendon was sutured to it. All this was performed in a single stage. Immobilization of the ankle was assured with plaster cast.

**Results:** Postsurgical evolution of the flap was without major complications. A minor marginal venous congestion that didn't endanger the flap was observed for several days after surgery and solved spontaneously. Plaster cast was removed at