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#### **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. (CO) BY-SA

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Introduction: Infected tissue defects associated with impaired skeletal always presented treatement 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

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

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two months and the patient started to work actively with the ankle joint but without weight bearing. At three months after surgery at radiologic examination bone consolidation was put into evidence. Three months after reconstruction functional score LEM (Low Extremity Measure) was 87% and the patient was full weight bearing. At three months and a half the patient returned to his previous employment.

Conclusions: Tibial posterior corticoperiosteocutaneous perforator flap proved to be effective for treatment of infected tissular defects in the calcaneal area with injury of Achilles tendon.

# THE STUDY OF INCIDENCES OF THUMB'S TRAUMA IN LESIONAL COMPLEX OF THE HAND

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Introduction: The increased incidence of hand trauma injuries ranks first in the human body. This continually stimulates surgeons ingenuity to find new performant ways in reconstructive methods. Although, they are facing, on the one hand, with complex hand's anatomy complex and, on the other hand, with the obligation to preserve the integrity of the nervous, vascular and tendon system, however, it is real the possibility of a complex reconstruction with similar tissues without creating significant defects.

Purpose: Distribution of thumb's lesional incidence in hand's trauma complex and items separation detected depending on the surface and levels of digital beam.

Material and methods: In this paper we included a group of 460 patients treated during the 2015 year. The age limits were between 19-70 years, divided into categories of 10 years. The sex ratio of the 79 patients with thumb injury was: 69 (87.34%) men and 10 (12.66%) women. Frequency of trauma registered in left member - 40 (50.34%), was higher than in the right one - 39 (49.67%). 79 (17.17%) patients from total group have suffered thumb's trauma, including: separate thumb - 46 (58.22%) and in complex with other fingers - 33 (41.78%). In thumb's trauma, according to segments, were included patients treated in hospital. Proximal phalanx was found to be most traumatized - 39 (49.36%) cases, followed by the distal phalanx - 37 (46.83%) cases and only in 3 (3.79%) cases have suffered both phalanges.

Results: incidents of separate thumb's trauma are met at 46 (58.22%) patients and in complex with other fingers in 33 (41.78%) patients, which constitutes in the ensemble of hand's trauma 17.17%. Processing of obtained material denotes prevalence of incidence of thumb's distal phalanx, but not the severity that manifests more pronounced as it progresses toward its base. This dictated the treatment's management and complexity of performed surgery.

Conclusion: Thumb's injuries in complex of hand's trauma are more often met as a separate trauma than in association with other fingers of the hand, with a prevalence in men, and left upper limb is affected with a slightly increased incidence. Keywords: trauma incidence, hand, thumb.

# COMPLICATIONS IN TREATMENT OF TIBIAL BONE DEFECTS USING ILIZAROV PROCEDURE

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Actuality: tibial bone defects represents really a challenge to orthopedic specialists because tibia, as one of the biggest bones of the skeleton, often cannot find enough bone "reserves" in the body to compensate the post traumatic losses. Especially in circular defects, this bone tissue "crisis" is felt intractable that the only viable solution to keep member remains callus distraction method. All other methods: vascularized bone, avascular allogeneic transplants, induced membrane method remain applicable in partial or small circular defects. However callus distraction method is a difficult, lengthy and permanently marked by various complications.

Aim: to review the complications manifested during treatment of circular diaphyseal tibial defects and the measures undertaken to overcome them successfully.

, the paper reflects the analysis carried out on 65 clinical cases of treatment of circular tibial defects. The study group was dominated by men - 48 cases, women being 14 cases. The maximum length of recovered tibial bone defect was 21 cm, the minimal - 5 cm. Most common complications were: infection of the tissues around brooches - 100%; soft tissue defects associated with bone defects - 92%; infections of the bone fragments - 17.8%; 56% delayed consolidation; non unions - 18%; brooches breaking - 7%; intraoperative bleeding - 4.7%; non formation of satisfactory regenerated mature bone - 3.8%;