Literatur zum Artikel
Nervenverletzungen der oberen Extremität

1. Ciaramitaro P, Mondelli M, Logullo F, et al (2010) Traumatic peripheral nerve injuries: epidemiological findings, neuropathic pain and quality of life in 158 patients. J Periph Nerv Syst 15: 120–127
2. Rosberg HE, Carlsson KS, Hojgard S, et al (2005) Injury to the human median and ulnar nerves in the forearm – analysis of costs for treatment and rehabilitation of 69 patients in southern Sweden. J Hand Surg 30: 35–39
3. Eser F, Aktekin LA, Bodur H, Atan C (2009) Etiological factors of traumatic peripheral nerve injuries. Neurol India 57: 434–437
4. Jaquet JB, Luijsterburg AJ, Kalmijn S, et al (2001) Median, ulnar, and combined median-ulnar nerve injuries: functional outcome and return to productivity. J Trauma 51: 687–692
5. Bruyns CN, Jaquet JB, Schreuders TA, et al (2003) Predictors for return to work in patients with median and ulnar nerve injuries. J Hand Surg 28: 28–34
6. Gesslbauer B, Hruby LA, Roche AD, et al (2017) Axonal components of nerves innervating the human arm. Ann Neurol 82: 396–408
7. Sunderland S (1951) A classification of peripheral nerve injuries producing loss of function. Brain 74: 491–516
8. Waller AV (1850) XX. Experiments on the section of the glossopharyngeal and hypoglossal nerves of the frog and observations of the alterations produced thereby in the structure of their primitive fibres. Phil Trans R Soc Lond 140: 423–429
9. Fu SY, Gordon T (1997) The cellular and molecular basis of peripheral nerve regeneration. Mol Neurobiol 14: 67–116
10. Seddon HJ, Medawar PB, Smith H (1943) Rate of regeneration of peripheral nerves in man. J Physiol 102: 191–215
11. Marble HC, Hamlin E, Watkins AL (1942) Regeneration in the ulnar, median and radial nerves. Am J Surg 55: 274–294
12. Hoke A, Zhou C, Redett R, Brushart T (2007) Differential growth factor expression in subsets of Schwann cells. Ann Neurol 62 (suppl 11): S-13
13. Chen YY, McDonald D, Cheng C, et al (2005) Axon and Schwann cell partnership during nerve regrowth. J Neuropathol Exp Neurol 64: 613–622
14. Nguyen QT, Sanes JR, Lichtman JW (2002) Pre-existing pathways promote precise projection patterns. Nat Neurosci 5: 861–867
15. Brushart TM, Mesulam MM (1980) Alteration in connections between muscle and anterior horn motoneurons after peripheral nerve repair. Science (NY) 208: 603–605
16. Bain JR, Veltri KL, Chamberlain D, Fahnestock M (2001) Improved functional recovery of denervated skeletal muscle after temporary sensory nerve innervation. Neuroscience 103: 503–510
17. Aszmann OC, Muse V, Dellon AL (1996) Evidence in support of collateral sprouting after sensory nerve resection. Ann Plast Surg 37: 520–525
18. Gordon T, Yang JF, Ayer K, et al (1993) Recovery potential of muscle after partial denervation: a comparison between rats and humans. Brain Res Bull 30: 477–482
19. Sunderland S (1965) The connective tissues of peripheral nerves. Brain 88: 841–854
20. Atkins S, Smith KG, Loescher AR, et al (2006) Scarring impedes regeneration at sites of peripheral nerve repair. Neuroreport 17: 1245–1249.
21. Mavrogenis AF, Pavlakis K, Stamatoukou A, et al (2008) Current treatment concepts for neuromas-in-continuity. Injury 39 (Suppl 3): S43–48
22. Brogan DM, Kakar S (2013) Management of neuromas of the upper extremity. Hand Clin 29: 409–420
23. AWMF (2013) Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften S3-Leitline „Versorgung peripherer Nervenverletzungen". AWMF online
24. Mackinnon SE, Dellon AL (1988) Diagnosis of nerve injury. Surgery of the peripheral nerve. Thieme, New York, S 74–78
25. Lan CY, Tien HY, Lin YT, et al (2019) Prognosis of traumatic ulnar nerve injuries: a systematic review. Ann Plast Surg 82: S45–s52
26. He B, Zhu Z, Zhu Q, et al (2014) Factors predicting sensory and motor recovery after the repair of upper limb peripheral nerve injuries. Neural Regen Res 9: 661–672
27. Weinzweig N, Chin G, Mead M, et al (2000) Recovery of sensibility after digital neurorrhaphy: a clinical investigation of prognostic factors. Ann Plast Surg 44: 610–617
28. Gaul JS Jr (1982) Intrinsic motor recovery – a long-term study of ulnar nerve repair. J Hand Surg 7: 502–508
29. Ruijs AC, Jaquet JB, Kalmijn S, et al (2005) Median and ulnar nerve injuries: a meta-analysis of predictors of motor and sensory recovery after modern microsurgical nerve repair. Plast Reconstr Surg 116: 484–494
30. Lundborg G (2000) Brain plasticity and hand surgery: an overview. J Hand Surg 25: 242–252
31. Black MM, Lasek RJ (1979) Slowing of the rate of axonal regeneration during growth and maturation. Exp Neurol 63: 108–119
32. Weinberg HJ, Spencer PS (1978) The fate of Schwann cells isolated from axonal contact. J Neurocytol 7: 555–569
33. Terenghi G, Calder JS, Birch R, Hall SM (1998) A morphological study of Schwann cells and axonal regeneration in chronically transected human peripheral nerves. J Hand Surg 23: 583–587
34. Sulaiman OA, Gordon T (2009) Role of chronic Schwann cell denervation in poor functional recovery after nerve injuries and experimental strategies to combat it. Neurosurgery 65: A105–14
35. Fu SY, Gordon T (1995) Contributing factors to poor functional recovery after delayed nerve repair: prolonged denervation. J Neurosci 15: 3886–3895
36. Wu P, Chawla A, Spinner RJ, et al (2014) Key changes in denervated muscles and their impact on regeneration and reinnervation. Neural Regen Res 9: 1796–1809
37. Aird RB, Naffziger HC (1953) The pathology of human striated muscle following denervation. J Neurosurg 10: 216–227
38. Kang H, Tian L, Mikesh M, et al (2014) Terminal Schwann cells participate in neuromuscular synapse remodeling during reinnervation following nerve injury. J Neurosci 34: 6323–6333
39. Sakuma M, Gorski G, Sheu SH, et al (2016) Lack of motor recovery after prolonged denervation of the neuromuscular junction is not due to regenerative failure. Eur J Neurosci 43: 451–462
40. Millesi H (1986) The nerve gap. Theory and clinical practice. Hand Clin 2: 651–663
41. Fu SY, Gordon T (1995) Contributing factors to poor functional recovery after delayed nerve repair: prolonged axotomy. J Neurosci 15: 3876–3885
42. Bergmeister KD, Schönle P, Böcker AH, et al (2018) Gezielte Therapieplanung bei traumatischen Nervenläsionen mittels MR-Neurographie. Handchir Mikrochir Plast 50: 232–240
43. Lundborg G, Rydevik B (1973) Effects of stretching the tibial nerve of the rabbit. A preliminary study of the intraneural circulation and the barrier function of the perineurium. J Bone Joint Surg Br 55: 390–401
44. Neubrech F, Sauerbier M, Moll W, et al (2018) Enhancing the outcome of traumatic sensory nerve lesions of the hand by additional use of a chitosan nerve tube in primary nerve repair: a randomized controlled bicentric trial. Plast Reconstr Surg 142: 415–424
45. Goldberg SH, Jobin CM, Hayes AG, et al (2007) Biomechanics and histology of intact and repaired digital nerves: an in vitro study. J Hand Surg 32: 474–482
46. Rinker B, Zoldos J, Weber RV, et al (2017) Use of processed nerve allografts to repair nerve injuries greater than 25 mm in the hand. Ann Plast Surg 78: S292–s5

47. Strauch B, Goldberg N, Herman CK (2005) Sural nerve harvest: anatomy and technique. J Reconstr Microsurg 21: 133–136
48. Azouz SM, Lucas HD, Mahabir RC, Noland SS (2018) A survey of the prevalence and practice patterns of human acellular nerve allograft use. Plast Reconstr Surg Global open 6: e1803
49. Tung TH, Mackinnon SE (2010) Nerve transfers: indications, techniques, and outcomes. J Hand Surg 35: 332–341
50. Novak CB, Mackinnon SE (2002) Distal anterior interosseous nerve transfer to the deep motor branch of the ulnar nerve for reconstruction of high ulnar nerve injuries. J Reconstr Microsurg 18: 459–464
51. Baltzer H, Woo A, Oh C, Moran SL (2016) Comparison of ulnar intrinsic function following supercharge end-to-side anterior interosseous-to-ulnar motor nerve transfer: a matched cohort study of proximal ulnar nerve injury patients. Plast Reconstr Surg 138: 1264–1272