



**NERVENIA s.r.l.**  
Via Cassini 81  
10129 Torino  
P.IVA: 11346230011

## **RIFERIMENTI BIBLIOGRAFICI**

### ***Anatomia funzionale e fisiologia del sistema nervoso***

- Appenzeller o., Dithal K.K., Cowan T., Burnstock G. (1984), The nerves to blood vessels supplying blood nerves: the innervation of vasa nervorum. *Brain Research* 304: 383-386.
- Baldwin W.M. (1908), The topography of spinal nerve roots. *Anatomical Record* 2: 155-156.
- Barnes R. (1949), Traction injuries of the brachial plexus in adults. *Journal of Bone and Joint Surgery* 31B: 10-16.
- Bedford P.D., Bosanquet F.D., Russel W.R. (1952), Degeneration of the spinal cord associated with cervical spondylosis. *Lancet* , July 12: 55-59.
- Bell M.A., weddell A.G.M. (1984), A Morphometric study of intrafascicular vessels of mammalian sciatic nerve. *Muscle & Nerve* 7: 524-534.
- Bisby M.A. (1982), Function of retrograde axonal transport. *Federation Proceedings* 41: 2307-2311.
- Blikna G. (1969) Intradural Herniated lumbar disc. *Journal of Neurosurgery* 31: 676-679.
- Blomberg R. (1986), The dorsomedian connective tissue band in the lumbar epidural space of humans. *Anaesthesia and Analgesia* 65: 747-752.

- Bogduk N. (1983), The innervation of the lumbar spine. *Spine* 8:286-293.
- Bogduk N. (1989), The anatomy of headache. In: Dalton M. (ed), *Proceedings of headache and face pain symposium*. Manipulative Physiotherapists Association of Australia, Brisbane.
- Bowsher D. (1988), *Introduction to the anatomy and physiology of the nervous system*, 5th edn. Blackwell, Oxford.
- Breig A. (1978), *Adverse mechanical tension in the central nervous system*. Almqvist & Wiksell, Stockholm.
- Bridge C.J. (1959), Innervation of spinal meninges and epidural structures. *Anatomical Record* 133: 533-561.
- Cautico W., Parker J.C., Pappert E., Pils S. (1988), An anatomical and clinical investigation of spinal meningeal nerves. *Acta neurochirurgica* 90:139-143.
- Cyriax J. (1982), *Textbook of Orthopaedic medicine* 8th ed. Bailliere Tindall, London, Vol. 1.
- Dahlin L.B., McLean W.G. (1986), Effects of graded experimental compression on slow and fast axonal transport in rabbit vagus nerve. *Journal of the neurological Sciences* 72: 19-30.
- Dahlin L.B., Nordborg C., Lundborg G. (1987), Morphological changes in nerve cell bodies induced by experimental graded nerve compression. *Experimental neurology* 95:611-621.
- Daniel R.K., Terzis J.K. (1977), *Reconstructive microsurgery*. Little Brown, Boston.
- De Renzi G. (1929), The structure of cells in tissues as revealed by microdissection. *Journal of Comparative Neurology* 47:405-425.
- Domisse G.F. (1974), The blood supply of the spinal cord. *Journal of Bone and Joint Surgery* 56B:225-235.
- Domisse G.F. (1975), Morphological aspects of the lumbar spine and lumbosacral region. *Orthopaedic Clinics of North America* 6:163-175.
- Domisse G.F. (1986), The blood supply of the spinal cord. In: Grieve G.P. (ed), *Modern manual therapy of the vertebral column*. Churchill Livingstone, Edinburgh.
- Droz B., Rambourg A., Koenig H.L. (1975), The smooth endoplasmic reticulum: structure and role in the renewal of axonal membrane and synaptic vesicles by fast axonal transport. *Brain Research* 93:1-13.
- Edgra M.A., Ghadially J.A. (1976), Innervation of the lumbar spine. *Clinical Orthopaedics and Related Research* 115:35-41.
- Epstein B.S. (1966), An anatomical, myelographic and cinematographic study of the dentate ligaments. *American Journal of Roentgenography* 98:704-712.

- Friede R.L., Samorajski T. (1969), The clefts of Schmidt-Lantermann: a quantitative electron microscopic study of their study in developing and adult sciatic nerves of the rat. *Anatomical Record* 165:89-92.
- Frykolm R. (1951), Lower cervical nerve roots and their investments. *Acta Chirurgica Scandinavica* 101:457-471.
- Gamble H.J., Eames R.A. (1964), An Electron microscope study of the connective tissues of human peripheral nerve. *Journal of Anatomy* 98:655-663.
- Gamble H.J. (1964), Comparative electron microscopic observations on the connective tissues of a peripheral nerve and a spinal nerve root in the rat. *Journal of Anatomy* 98:17-25.
- Gardner E., Bunge R.P. (1984), Gross anatomy of the peripheral nervous system. In: Dyck P.J., Thomas P.K., Lambert E.H., Bunge R. (eds), *Peripheral neuropathy*, 2nd ed. Saunders, Philadelphia, Vol. 1.
- Galberman R.H., Szabo R. M., Williamson R.V. (1983), Tissue pressure threshold for peripheral nerve viability. *Clinical Orthopaedics and Related Research* 178:285-291.
- Glees P. (1943), Observation on the connective tissue sheaths of nerves. *Journal of Anatomy* 77:153-159.
- Groen G.J. Baljet B., Drukker J. (1988), The innervation of the spinal dura mater: anatomy and clinical consideration. *Acta Neurochirurgica* 92:39-46.
- Haak R.A., Kleinhaus F.W., Ochs S. (1976), The viscosity of mammalian nerve axoplasm measured by electron spin resonance. *Journal of Physiology* 263:115-137.
- Haller F.R., Haller A.C., Low F.N. (1971), The fine structure of cellular layers and connective tissue space at spinal nerve root attachments in the rat. *American Journal of Anatomy* 133:109-124.
- Hasue M., Kikuchi S., Sakuyama Y., Ito T. (1983), Anatomic study of the interrelation between lumbosacral nerve root and their surrounding tissues. *Spine* 8:50-58.
- Haupt W., Stofft E. (1978), Über die Dehnbarkeit und Reißfestigkeit der dura mater spinalis des Menschen. *Verhandlungen der Anatomischen Gesellschaft*. 72:139-142.
- Hollinshead W.H., Jenkins D.J. (1981), *Functional anatomy of the limbs and back*, 5th ed. Saunders, Philadelphia.
- Hovelacque A. (1927), *Anatomie des nerfs crâniens et rachidiens et du système grand sympathique chez l'homme*. Gaston Doin et Cie, Paris.
- Howe J.F., Calvin W.H., Loeser J.D. (1976), Impulses reflected from dorsal root ganglia and from focal nerve injuries. *Brain Research* 116:1390-1344.
- Howe J.F., Loeser J.D., Calvin W.H. (1977), Mechanosensitivity of dorsal root ganglia and

chronically injured axons: a physiological basis for the radicular pain of nerve root compression. *Pain* 3:669-678.

- Hromanda J. (1963), On the nerve supply of the connective tissue of some peripheral nervous system components. *Acta Anatomica* 55:343-351.
- Inman V.T., Saunders J.B (1942), The clico-anatomical aspects of the lombosacral region. *Radiology* 38:669-678.
- Jabaley M.E., Wallace W.H., Heckler F.R. (1980), Internal topography of major nerves of the forearm and hand. A current view. *Journal of Hand Surgery* 5:1-18.
- Jojich P.M, Rubin J. M., Doirman G.B. (1984), Intra-operative ultrasonic evaluations of spinal cord motions. *Journal of Neurosurgery* 60:707-717.
- Kimmel D.L. (1961) Innervation of the spinal dura mater and dura mater of the posterior cranial fossa. *Neurology* 10:800-805.
- Korr I.M. (ed) (1978), *the neurobiologic mechanisms in manipulative therapy*. Plenum, New York.
- Korr I.M. (1985), Neurochemical and neurotrophic consequences of nerve deformation. In: Glasgow E.F., Twomey L.T., Scull E.R. Kleynhans A.M. (eds), *Aspects of manipulative therapy*, 2nd ed. Churchill Livingstone, Edinburgh.
- Kristensson K., Olsson Y. (1977), Retrograde transport of horseradish peroxidase in transected axons. 3. Entry into injured axons and subsequent localisation in perikaryon. *Brian Research* 126:154-159.
- Kristensson K. (1982), Implications of axoplasmic transport for the spread of virus infection in the nervous system. In: Weiss D.G., Gorio A. (eds), *axoplasmic transport in physiology and pathology*. Springer-Verlag, Berlin.
- Kwan M.K. Rydevik B.L., Myers R.R. et al. (1988), Stretch injury of rabbit peripheral nerve: a biomechanical and histological study. In: *Proceeding 34th annual meeting, Orthopaedic Research Society*, February 1-4, Atlanta, Georgia.
- Landon D.N., Williams P.L. (1963), The ultrastructure of the node of Ranvier. *Nature* 199:575-577.
- Lazorthes G., Gauze A., Zadeh J.O. (1971), Arterial vascularisation of the spinal cord. *Journal of Neurosurgery*. 35:253-261.
- Levine J., Willard M. (1980), The Composition and organisation of axonally transported proteins in the retinal ganglion cells of the guinea pig. *Brian Research* 194:137-154.
- Louis R. (1981), Vertebriradicular and vertebromedullar dynamics. *Anatomica clinica* 3:1-11.
- Lundborg G. (1970), Ischaemic nerve injury: experimental studies on intraneural microvascular pathophysiology and nerve function in a limb, subjected to temporary

circulatory arrest. *Scandinavian Journal of Plastic and Reconstructive Surgery* (Suppl) 6:1-113.

- Lundborg G. (1975), Structure and function of the intraneural microvessels as related to trauma, edema formation and nerve function. *Journal of Bone and Joint Surgery* 57A:938-948.
- Lundborg G. (1981), Mechanical effects on circulation and nerve function. In: Gorio A., Millesi H., Mingero S. (eds), *Post-traumatic nerve regeneration*. Raven Press, New York.
- Lundborg G. (1988), *Nerve injury and repair*. Churchill Livingstone, Edinburgh.
- 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. *Journal of Bone and Joint Surgery* 55B:390-401.
- Luschka H. von (1850), *Dienerven des menschlichen Hirnkanals*. Luapp, Tübingen.
- Mackinnon S.E., Dellon A.L. (1988), *Surgery of the peripheral nerve*. Thieme, New York.
- Mackinnon S.E., Dellon A.L., Hudson A.R. et al. (1984), Chronic nerve compression – an experimental model in the rat. *Annals of Plastic Surgery*. 13:112-120.
- Martins A.M., Wiley J.K., Myers P.W. (1972), Dynamics of the cerebrospinal fluid and the spinal dura mater. *Journal of Neurology, Neurosurgery and Psychiatry* 35:468-473.
- Mathers L.H. (1985), *The peripheral nervous system*. Butterworths, Boston.
- McLellan D.C., Swash M. (1976), Longitudinal sliding of the median nerve during movements of the upper limb. *Journal of Neurology, Neurosurgery and Psychiatry*. 39:566-570.
- Millesi H. (1986), The nerve gap: theory and clinical practice. *Hand Clinics* 4:651-663.
- Murphy R.W. (1977), nerve roots and spinal nerves in degenerative disc disease. *Clinical Orthopaedics and Related Research* 129:46-60.
- Murzin V.E., Goriunov V.N. (1979), Study of strength of fixation of dura mater to the cranial bones. *Zh Vopr Neurokhir* 4:43-47.
- Myers R.M., Murakami H., Powell H.C. (1986), Reduced nerve blood flow in edematous neuropathy: a biomechanical mechanism. *Microvascular Research* 32:145-151.
- Nathan H., Feuerstein M. (1970), Angulated course of spinal nerve roots. *Journal of Neurosurgery* 32:349-352.
- Nicholas D.S., Weller R.O. (1988), The fine anatomy of the human spinal meninges. *Journal of Neurosurgery* 69:276-352.
- Ochs S. (1974), Energy metabolism and supply of ATP to the fast axoplasmic transport mechanism in nerve. *Federation Proceedings* 33:1049-1058.

- Ochs S. (1984), basic properties of axoplasmic transport. In: Dyck P.J., Thomas P.K., Lambert E.H., Bunge R. (eds), *Peripheral Neuropathy*, 2nd ed. Saunders, Philadelphia.
- Ogata K., Naito M. (1986), Blood flow of peripheral nerve. Effects of dissection, stretching and compression. *Journal of Hand Surgery* 11B:10-14.
- Olsson Y., Reese T. (1971), Permeability of vasa nervorum in mouse sciatic nerve studies by fluorescence and electron microscopy. *Journal of Neuropathology and Experimental Neurology* 30:105-119.
- Olsson Y., Kristensson K., Klatzo J. (1971), Permeability of blood vessels in connective tissue sheaths in the peripheral nervous system to exogenous proteins. *Acta Neuropathologica Berlin (Suppl)* 5:61-69.
- Parke W.W., Gammell K, Rothman R.H.(1981), Arterial Vascularization of the cauda equina. *Journal of Bone and Joint Surgery* 63A:53-62.
- Parke W.W., Watanabe R. (1985), The intrinsic vasculature of the lumbosacral spinal nerve roots. *Spine* 10:508-515.
- Parke W.W., Watanabe R. (1990), Adhesions Of the ventral dura mater. *Spine* 15:300-303.
- Parking I.G., Harrison G.R. (1985), The topographical anatomy of the lumbar epidural space. *Journal of Anatomy* 141:211-217.
- Penfield W., McNaughton F. (1940), Dural headache and the innervation of the dura mater. *Archives of Neurology and Psychiatry* 44:43-75.
- Penning L., Wilmsink J.T. (1981), Biomechanics of the lumbosacral dural sac: a study of flexion-extension myelography. *Spine* 6:398-408.
- Powell H.C., Myers R.R. (1986), Pathology of experimental nerve compression. *Laboratory Investigation* 55:91-100.
- Porter E.L., Wharton P.S. (1949), Irritability of mammalian nerve following ischaemia. *Journal of Neurophysiology* 12:109-116.
- Reid J.D. (1958), Ascending nerve roots and tightness of dura mater. *New Zealand Medical Journal* 57:16-26.
- Reid J.D. (1960), Ascending nerve roots. *Journal of Neurology, Neurosurgery and Psychiatry* 23:214-221.
- Robertson J.D. (1958), The Ultrastructure of the Schmidt-Lantermann clefts and shearing defects of the myelin sheath. *Journal of Biophysics, Biochemistry and Cytology* 4:39
- Romanes G.L. (1981), *Cunningham's manual of practical anatomy*, 14th ed. Oxford, London.
- Rydevik B., Lundborg G (1977), Permeability of intraneural microvessels and perineurium following acute graded experimental nerve compression. *Scandinavian Journal of Plastic and Reconstructive Surgery* 11:179-187.

- Rydevik B., Lundborg G., Nordborg C. (1976), Intraneural tissue reactions induced by internal neurolysis. *Scandinavian Journal of Plastic and Reconstructive Surgery* 10:3-8.
- Rydevik B., Lundborg G. Bagge U. (1981), Effects of graded compression on intraneural blood flow. *Journal of Hand Surgery* 6:3-12.
- Rydevik B. Brown M.D., Lundborg G. (1984), Pathoanatomy and Pathophysiology of nerve root compression. *Spine* 9:7-15.
- Savolaine E.R., Pandja J. B., Greenblatt E.H. et al. (1988), Anatomy of the lumbar epidural space: new insights using CT-epidurography. *Anaesthesiology* 68:217.
- Selander D., Sjostrand J. (1978), Longitudinal spread of intraneurally injected local anesthetic. *Acta Anaesthesiologica Scandinavica* 22:622-634.
- Shanthaveerappa T.R., Bourne G.H. (1963), The perineural epithelium: nature and significance. *Nature* 199:577-579.
- Singer M., Byrant S.V. (1969), Movements in the myelin schwann sheath of the vertebrate axon. *Nature* 221:1148-1150.
- Smith J.W. (1966), Factors influencing nerve repair 1. Blood supply of peripheral nerves. *Archives of Surgery* 93:335-341.
- Spencer D.J., Irwin G.S., Miller J.A.A. (1983), Anatomy and significance of function of the lumbosacral nerve roots in sciatica. *Spine* 8:672-679.
- Spielman F.J. (1982), Post lumbar puncture headache . *Headache* 22:280-283.
- Sunderland S., Bradley K.C. (1949), The cross sectional area of peripheral nerve trunks devoted to nerve fibres. *Brain* 72:428-439.
- Sunderland S. (1974), Meningeal-neural relations in the intervertebral foramen. *Journal of Neurosurgery* 40:756-763.
- Sunderland S. (1976), The nerve lesion in carpal tunnel syndrome. *Journal of Neurology, Neurosurgery and Psychiatry* 39:615-616.
- Sunderland S. (1978), *Nerves and nerve injuries*, 2nd ed. Churchill Livingstone, Edinburgh.
- Sunderland S. (1979), The painful nerve lesion: a prologue. In: Bonica J.J. et al. (eds), *Advances in Pain Research and Therapy*. Raven Press, New York 3:36-37.
- Sunderland S (1989), Features of Nerve that protect them during normal daily activities. In: Jones H.M., Jones M.A., Milde M.R. (eds), *Sixth biennial conference proceedings*, Manipulative Therapists Association of Australia, Adelaide.
- Tani S., Yamada S., Knighton R.S. (1987), Extensibility of the lumbar and sacral cord: pathophysiology of the tethered spinal cord in cats. *Journal of Neurosurgery* 66:116-123.

- Tencer A.F., Allen B.L., Ferguson R.L. (1985) A Biomechanical study of thoracolumbar spine fractures with bone in the canal. Part 3, Mechanical properties of the dura mater and its tethering ligaments. *Spine* 10:741-747.
- Thomas P.K. (1963), The connective tissue of peripheral nerve: an electron microscope study. *Journal of Anatomy* 97:35-44.
- Thomas P.K. (1982), Pain in peripheral neuropathy: clinical and morphological aspects . In: Culp W.J., Ochoa J. (eds), *Abnormal nerves and muscles as impulse generators*. Oxford, New York.
- Thomas P.K., Olsson Y. (1985), Microscopic anatomy and function of the connective tissue components of peripheral nerve. In: Dyck P.J., Thomas P.K., Lambert E.H., Bunge R. (eds), *Peripheral Neuropathy*, 2nd ed. Saunders, Philadelphia.
- Transfeldt E.E., Simmons E.H. (1982), *Functional and pathological biomechanics of the spinal cord: an in-vivo study*. International society for the study of the lumbar spine, Toronto.
- Tunturi A.R. (1977), Elasticity of the spinal cord dura in the dog. *Journal of Neurosurgery* 47:391-396.
- Van Beek A., Kleinert H.E. (1977), Practical microneurography. *Orthopaedic Clinics of North America* 8:377-386.
- Van Noort R., Black M.M., Martin T.R.P., Meanley S. (1981), A study of the uniaxial mechanical properties of human dura mater preserved in glycerol. *Biomaterials* 2:41-45.
- Varon S., Adler R. (1980), Nerve growth factor and control of nerve growth. *Current Topics in Developmental Biology* 16:207-252.
- Waggner J.D., Beggs J. (1967), The membranous coverings of neural tissues : an electron microscopy study. *Journal of Neuropathology and Experimental Neurology* 26:412-416.
- Waksman B.H. (1961), Experimental study of diphtheric polyneuritis in the rabbit and guinea pig. III. The blood-nerve barrier in the rabbit. *Journal of Neuropathology and Experimental Neurology* 21:35-77.
- Walton J (1982), *Essentials of neurology*, 5th ed. Pitman, London.
- White A.A., Panjabi M.M. (1978), *Clinical biomechanics of the spine*. Lippincott, Philadelphia.
- Wilgis S., Murphy R. (1986), The significance of longitudinal excursions in peripheral nerves. *Hand Clinics* 2:761-768.
- Williams P.L., Warwick R. (1980), *Gray's anatomy*, 36th ed. Churchill Livingstone, Edinburgh.

## Neurobiomeccanica clinica



- Adams C.B.T., Logue V. (1971), Studies in cervical spondylotic myelopathy. *Brain* 94:557-568
- Apfelberg D.B., Larsen S.J. (1973), Dynamic anatomy of the ulnar nerve at the elbow. *Plastic and Reconstructive Surgery* 51:76-81.
- Babin E., Capesius P. (1976), Etude radiologique des dimensions du canal rachidien cervical et de leurs variations au cours des épreuves fonctionnelles. *Annals of Radiology* 19:457-462.
- Bell A. (1987), The upper limb tension test – bilateral straight leg raising – a validating manoeuvre for the upper limb tension test. In: Dalziel B.A., Snowsill J.C. (eds), *Fifth biennial conference*,
- Manipulative Therapists Association of Australia, Melbourne.
- Blikna G. (1969), Intradural herniated lumbar disc. *Journal of Neurosurgery* 31:676-679.
- Bohannon R., Gljdosik R., Le Veau B.F. (1985), Contributions of pelvic and lower limb motion to increases in the angle of passive straight leg raising. *Physical Therapy* 65:474-476.
- Borges L.F., Hallet M., Selkoe D.J., Welch K. (1981), The anterior tarsal tunnel syndrome. *Journal of Neurosurgery* 54:89-92.
- Breig A. (1978), *Adverse mechanical tension in the central nervous system*. Almqvist & Wiksell, Stockholm.
- Breig A., Marions O. (1963) Biomechanics of the lumbosacral nerve roots. *Acta Radiologica* 4:602-604.
- Breig A., Troup J.D.C. (1997), Biomechanical considerations in the straight leg raising test. *Spine* 4:242-250.
- Butler D. (1989), Adverse mechanical tension in the nervous system: a model for assessment and treatment. *Australian Journal of Physiotherapy* 5:227-238.
- Charnley J. (1951), Orthopaedic signs in the diagnosis of disc protrusion. *Lancet* 1:186-192.
- Cyriax J. (1978), *Textbook of orthopaedic medicine*, 7th ed. Bailliere Tindall, London, Vol. 1.
- Dodge H.W., Love J.G., Gottlieb C.M. (1956), Benign tumours at the foramen magnum: surgical considerations. *Journal of Neurosurgery* 13:603-617.
- Domisse G.F. (1975), Morphological aspects of the lumbar spine and lumbosacral region. *Orthopaedic Clinics of the North America* 6:163-175.
- Domisse G.F. (1986), The blood supply of the spinal cord. In: Grieve G.P. (ed), *Modern manual therapy of the vertebral column*. Churchill Livingstone, Edinburgh.
- Dyck P. (1979), The stoop-step in lumbar entrapment radioculopathy. *Spine* 4:89-92.
- Edwards B.E. (1987) Clinical assessment: the use of combined movements in assessment and treatment. In: Twomey L.T., Taylor J.T. (eds), *Clinics in physical therapy*, Vol. 13, *Physical therapy of the low back*. Churchill Livingstone, New York.
- Edwards B.E. (1988), combined movement of the cervical spine in examination and treatment. In: Grant R. (ed), *Clinics in physical therapy*, Vol 17, *Physical therapy of the cervical and thoracic spine*. Churchill Livingstone, New York.
- Elvey R.L. (1980), Abnormal brachial plexus tension signs. In: *Proceedings, Second biennial conference*, Manipulative therapists Association of Australia, Adelaide.
- Fahrni W.H. (1966), Observations on straight leg raising with special reference to nerve root adhesions. *Canadian Journal of Surgery* 9:44-48.
- Farfan (1975), *Mechanical disorders of the low back*. Lea & Febiger, Philadelphia.
- Godbard M.D., Reid J.D. (1965), Movements induced by straight leg rising in the lumbosacral roots, nerves and plexuses and in the intra-pelvic section of the sciatic nerve. *Journal of Neurology, Neurosurgery and Psychiatry* 28:12-18.
- Haupt W., Stofft E. (1978), Über die Dehnbarkeit und Reißfestigkeit der dura mater spinalis des Menschen. *Nehr Anat Ges* 72:139-142.
- Inman V.T., Saunders J.B. (1942), The clinico-anatomical aspects of the lumbosacral region. *Radiology* 38:669-678.

- Jirout J. (1959), The mobility of the cervical spinal cord under normal conditions. *British Journal of Radiology* 32:744-751.
- Liyang D. et al. (1988), The effect of flexion-extension motion of the lumbar spine on the capacity of the spinal canal. *Spine* 14:523-525.
- Louis R. (1981), Vertebroradicular and vertebromedullar dynamics. *Anatomica Clinica* 3:1-11.
- Lundborg G., Rydevik B. (1973), Effects of stretching the tibial nerve of the rabbit: a preliminary study of the intraneural circulation and barrier function of the perineurium. *Journal of Bone and Joint Surgery* 55B: 390-401.
- Lundborg G. (1988), *Nerve injury and repair*. Churchill Livingstone, Edinburgh.
- Macnab I. (1971), The whiplash syndrome. *Orthopaedic Clinics of North America* 2:389-403.
- Macnicol M.F. (1980), Mechanics of the ulnar nerve at the elbow. *Journal of Bone and Joint Surgery* 62B: 531-532.
- Maitland G.D. (1986), *Vertebral manipulation*, 5th ed. Butterworths, London.
- Mannen T. (1966), Vascular Lesions in the spinal cord of the aged. *Geriatrics* 21:151-160.
- Mauhart D. (1969), The effect of chronic inversion ankle sprains on the plantarflexion/inversion straight leg raise. Unpublished thesis, South Australian Institute of Technology, Adelaide.
- McKenzie R.A. (1981), *The lumbar spine : mechanical diagnosis and therapy*. Spinal Publications, Waikanae.
- McLellan D.L., Swash M. (1976), Longitudinal sliding of the median nerve during movements of the upper limb. *Journal of Neurology, Neurosurgery and Psychiatry* 39:566-570.
- Miller A.M. (1987), Neuro-meningeal limitation of straight leg raising . In: Dalziel B.A., Snowsill J.C. (eds), *Fifth biennial conference*, Manipulative Therapists Association of Australia, Melbourne.
- Millesi H. (1986), The nerve gap: theory and clinical practice. *Hand Clinics* 2:651-663.
- Millesi H., Berger C., Meissl G. (1972), Experimentelle untersuchungen zur heilung durchtrennter peripherer nerven. *Chirurgica Plastica* 1:174-206.
- Mooney V., Robertson J. (1976), The facet syndrome. *Clinical Orthopaedics and Related Research* 115:149-156.
- Nathan H.(1986), Osteophytes of the spine compressing the sympathetic trunk and splanchnic nerves in the thorax. *Spine* 12:527-532.
- Ogata K., Naito M. (1986), Bloodflow of peripheral nerve: effects of dissection, compression and stretching. *Journal of Hand Surgery* 11B:11-14.
- Panjabi M.M., Takata K., Goel V.K. (1983), Kinematics of lumbar intervertebral foramen. *Spine* 8:348-357.
- Parke W.W. (1988), Correlative anatomy of cervicalspondylotic neuropathy. *Spine* 13:831-837.
- Parke W.W., Watanabe R. (1990), Adhesions of the ventral dura mater. *Spine* 15:300-303.
- Pechan J., Julis F. (1975), The Pressure measurement in the ulnar nerve: a contribution to the pathophysiology of cubital tunnel syndrome. *Journal of Biomechanics* 8:75-79.
- Penning L., Wilmsink J.T. (1981), Biomechanics of the lumbosacral dural sac. *Spine* 6:398-408.
- Reid J.D. (1960), Effects of flexion-extension movements of the head and spine upon the spinal cord and nerve roots. *Journal of Neurology, Neurosurgery and Psychiatry* 23:214-221.
- Rubenach H. (1987), The upper limb tension test. In: *Proceedings World Congress of Physiotherapy*, Sydney.
- Rydevik B., Lundborg G., Bagge U. (1981), Effects of graded compression on intraneural

- blood flow, an in-vivostudy on rabbit tibial nerve. *Journal of Hand Surgery* 6:3-12.
- Schneider R.C., Schemm G.W. (1961), Vertebral artery insufficiency in acute and chronic spinal trauma with special reference to the syndrome of acute central cervical spinal injury. *Journal of Neurosurgery* 18:348-360.
  - Selveratnam P.J., Glasgow E.F., Matyas T. (1989), Differential strain produced by the brachial plexus tension test on C5 to T1 nerve roots. In: Jones H.M., Jones M.A., Milde M.R. (eds), *Sixth biennial conference proceedings*, Manipulative Therapists Association of Australia, Adelaide.
  - Shacklock M. (1989), The plantarflexion/inversion straight leg raise. Unpublished thesis. *South Australian Institute of Technology*, Adelaide.
  - Slater H. (1989), The effect of foot and ankle position on the response to the SLR test. In: Jones H.M., Jones M.A., Milde M.R. (eds), *Sixth biennial conference proceedings*. Manipulative therapists Association of Australia, Adelaide.
  - Smith C.G. (1956), Changes in length and posture of the segments of the spinal cord with changes in posture in the monkey. *Radiology* 66:259-265.
  - Sunderland S. (1978), *Nerves and nerve injuries*, 2nd ed. Churchill Livingstone, Edinburgh.
  - Tencer A.N., Allen B.L., Ferguson R.L. (1985), A biomechanical study of thoraco-lumbar spine fractures with bone in the canal, Part 111, Mechanical properties of the dura and its tethering ligaments. *Spine* 10:741-747.
  - Torkildson A. (1956), Lesions of the cervical nerve roots as a possible source of pain simulating sciatica. *Acta Psychiatrica Scandinavica* 31:333-334.
  - White A.A., Panjabi M.M. (1978), *Clinical biomechanics of the spine*. Lippincott, Philadelphia.
  - Wilgis E.F.S. & Murphy R. (1986), The significance of longitudinal excursion in peripheral nerves. *Hand Clinics* 2:761-766.

### **Processi Patologici Neurogeni**

- Armstrong T.J., Castelli W.A., Evans F.G. et al. (1984), Some histological changes in carpal tunnel contents and their biomechanical implications. *Journal of Occupational Medicine* 26:197-200.
- Asbury A.K. (1973), Renaut bodies: a forgotten endoneurial structure. *Journal of Neuropathology and Experimental Neurology* 32:334-343.
- Bell J.A., Groswald D.E., Luttges M.W. (1984), Alterations in the mechanical properties of peripheral nerve following crush injury. *Journal of Biomechanics* 17:185-193.
- Bell J.A., Stodieck L.S., Luttges M.W. (1984), Structural properties of spinal nerve roots: biomechanics. *Experimental Neurology* 91:30-40.
- Bendler E.M., Greenspun D.O., Yu J. et al. (1977), The bilaterality of carpal tunnel syndrome. *Archives of Physical Medicine and Rehabilitation* 58:362-368.
- Bogduk N., Twomey L.T. (1987), *Clinical anatomy of the lumbar spine*. Churchill Livingstone, Melbourne.
- Bohlman H.H., Emery S.E. (1988), The pathophysiology of cervical spondylosis and myelopathy. *Spine* 3:843-846.
- Breig A. (1978), *Adverse mechanical tension in the central nervous system*. Almqvist & Wiksell, Stockholm.
- Butler D.S. (1989), Adverse mechanical tension in the nervous system: a model for assessment and treatment. *Australian Journal of Physiotherapy* 35:227-238.
- Butler D.S., Gifford L.S. (1989), The concept of adverse mechanical tension in the nervous system, Part 1, Testing for 'dural tension'. *Physiotherapy* 75:622-629.
- Calvin W.H., Devor M., Howe J.F. (1982), Can neuralgias arise from minor demyelination? Spontaneous firing, mechanosensitivity and afterdischarge from conducting axons.

*Experimental Neurology* 75:755-763.

- Castelli W.A, Evans F.G., Diaz-Perez R. et al. (1980), Intraneural connective tissue proliferation of the median nerve in the carpal tunnel. *Archives of Physical Medicine and Rehabilitation* 60:418-422.
- Cassvan A., Rosenberg A., Rivers L.F. (1986), Ulnar nerve involvement in carpal tunnel syndrome. *Archives of Physical Medicine and Rehabilitation* 67:290-292.7
- Chang K.S.F., Low W.D., Chan S.T: et al. (1963), Enlargement of the ulnar nerve behind the medial epicondyle. *Anatomical Record* 145:149-153.
- Cherington M.(1974), Proximal pain in carpal tunnel syndrome. *Archives of Surgery* 108:69.
- Cusick J.F., Mycklebust J., Zyvoloski M. et al. (1982), Effects of vertebral column distraction in the monkey. *Journal of Neurosurgery* 57:661-659.
- Dahlin L.B., Rydevik B., McLean W.G. et al. (1984), Change in fast axonal transport during experimental nerve compression at low pressures. *Experimental Neurology* 84:29-36.
- Dahlin L.B., McLean W.G. (1986), Effects of graded experimental compression on slow and fast axonal transport in rabbit vagus nerve. *Journal of the Neurological Sciences* 72:19-30.
- Dahlin L.B., Sjostrand J., McLean W.G: (1986), Graded inhibition of retrograde axonal transport by compression of rabbit vagus nerve. *Journal of the Neurological Sciences* 76:221-230.
- Davies J.A. (1979), Peroneal Compartment syndrome secondary to rupture of the peroneus longus. *Journal of Bone and Joint Surgery* 61A:783-784.
- Devor M. (1983), Nerve Pathophysiology and mechanisms of pain in causalgia. *Journal of the Autonomic Nervous System* 7:371-384.
- Dolan E.J., Transfeldt E.E., Tator C.H: et al. (1980), The effect of spinal distraction on regional spinal cord blood flow in cats. *Journal of Neurosurgery* 53:756-764.
- Doppman J.L. (1975), The mechanism of ischemia in anteroposterior compression of the spinal cord. *Investigative Radiology* 10:543-551.
- Dyro F.M. (1983), Peripheral entrapments following brachial plexus lesions. *Electromyography and Clinical Neurophysiology* 23:251-256.
- Faithfull D.K., Moir D.H., Ireland J. (1985), The micropathology of the typical carpal tunnel syndrome. *Journal of Hand Surgery*. 11B:131-132.
- Fernandez E., Pallini R. (1986), Connective tissue scarring in experimental spinal cord lesions: significance of dural continuity and the role of epidural tissues. *Acta Neurochirurgica* 76:145-148.
- Ford D.J., Ali M.S. (1985), Acute carpal tunnel syndrome. *Journal of Bone and Joint Surgery* 65B: 758-759.
- Fowler T.J., Danta G., Gilliat R.W. (1972), Recovery of nerve conduction after a pneumatic tourniquet: observations on the hind limb of the baboon. *Journal of Neurology, Neurosurgery and Psychiatry* 35:638-647.
- Fowler T.J., Ochoa J. (1975), Unmyelinated fibres in normal and compressed peripheral nerves of the baboon: a quantitative electron microscopic study. *Neuropathology and Applied Neurobiology* 1:247-265.
- Gasser H.S., Erlanger J. (1929), The role of fibre size in the establishment of a nerve block by pressure or cocaine. *American Journal of Physiology* 88:581-591.
- Gelberman R.H., Hergenroeder P.T., Hargens A.R. et al. (1981), The carpal tunnel syndrome: a study of carpal canal pressure. *Journal of Bone and Joint Surgery* 63A: 380-383.
- Gilliat R.W. (1981), Physical injury to peripheral nerves: Physiologic and electrodiagnostic aspects. *Mayo Clinic Proceedings* 56:361-370.
- Golub B.S., Silverman B. (1969), Transforaminal ligaments of the lumbar spine. *Journal of Bone and Joint Surgery* 51A: 947-956.

- Gooding M.R., Wilson C.B., Hoff J.T. (1975), Experimental cervical myelopathy: effects of ischaemia cervical myelopathy: effects of ischaemia and compression of the canine cervical spinal cord. *Journal of Neurosurgery* 43:9-17.
- Gunn C.C. (1980), Prespondylosis and some pain syndromes following denervation supersensitivity. *Spine* 5:185-192.
- Guttman L. (1972), Median-ulnar nerve communications and carpal tunnel syndrome. *Journal of Neurology, Neurosurgery and Psychiatry* 40:982-986.
- Guyon M.A., Honet J.C. (1977), CTS or trigger finger associated with neck injury in automobile accidents. *Archives of Physical Medicine and Rehabilitation* 58:325-327.
- Haftek J. (1970), Stretch injury of peripheral nerve: acute effects of stretching on rabbit nerve. *Journal of Bone and Joint Surgery* 52B:354-365.
- Howe J.F., Calvin W.H., Loeser J.D. (1976), Impulses reflected from dorsal root ganglia and from focal nerve injuries. *Brain Research* 116:139-144.
- Howe J.F., Loeser J.D., Calvin W.H. (1977), Mechanosensitivity of dorsal root ganglia and chronically injured axons: a physiological basis for the radicular pain of nerve root compression. *Pain* 3:25-41.
- Hurst L.C., Weissberg D., Carroll R.E. (1985), The relationship of double crush to carpal tunnel syndrome (an analysis of 1,000 cases of carpal tunnel syndrome). *Journal of Hand Surgery* 10B:202-204.
- Jefferson D., Neary D., Eames R.A. (1981), Renaut body distribution at sites of human peripheral nerve entrapment. *Journal of the Neurological Sciences* 49:19-29.
- Kadish L.J., Simmons E.H. (1984), Anomalies of the lumbosacral nerve roots. *Journal of Bone and Joint Surgery* 66B: 411-416.
- Kikuchi S., Hasue M., Nishiyama K., Tsukasa I. (1984), Anatomic and clinical studies of radicular symptoms. *Spine* 9:23-30.
- Kobrine A.I., Evans D.E., Rizzoli H. (1978), Correlation of spinal cord blood flow and function in experimental compression. *Surgical Neurology* 10:54-59.
- Korr I.M. (1985), Neurochemical and neurotrophic consequences of nerve deformation. In: Glasgow E.F et al. (eds), *Aspects of manipulative therapy*, 2nd ed. Churchill Livingstone, Melbourne.
- Leyshon A., Kirwan E.O.G., Wynn Parry C.B. (1981), Electrical studies in the diagnosis of compression of the lumbar root. *Journal of Bone and Joint Surgery* 63B:71-75.
- Lishman W.S., Russel W.K. (1961), The Brachial neuropathies. *Lancet* 2:941-947.
- Louis R. (1981), Vertebro-radicular and vertebro-medullary dynamics. *Anatomica clinica* 3:1-11.
- Lundborg G. (1980), Ischemic nerve injury: Experimental studies on intraneural microvascular pathophysiology and nerve function in a limb, subjected to temporary circulatory arrest. *Scandinavian Journal of Plastic and Reconstructive Surgery (Suppl)* 6:1-113.
- Lundborg G. (1988), *Nerve injury and repair*. Churchill Livingstone, Edinburgh.
- Lundborg G., Dahlin L.B. (1989), Pathophysiology of nerve compression. In: Szabo R.M. (ed), *Nerve compression syndromes*. Slack, Thorofare.
- Luttgies M.W., Kelly P.T., Gerren R.A. (1976), Degenerative changes in mouse sciatic nerve: electrophoretic and electrophysiological characterisation. *Experimental Neurology* 50:706-733.
- Mackinnon S.E., Dellon A.L. (1988), *Surgery of the peripheral nerve*. Thieme, New York.
- Marzo J.M., Simmons E.H., Kallen F. (1987), Intradural connections between adjacent cervical nerve roots. *Spine* 12:964-968.
- Massey E.W., Riley T.L., Pleet A.B. (1981), Coexistent carpal tunnel syndrome and cervical radioculopathy (double crush syndrome). *Southern Medical Journal* 74:957-959.
- McComas A.J., Jorgensen P.B., Upton A.R.M. (1974), The neuropraxic lesion: a clinical

contribution to the study of thropic mechanisms. *Canadian Journal of Neurological Sciences* 1:170-179.

- McLellan D.C., Swash M. (1976), Longitudinal sliding of the median nerve during movements of the upper limb. *Journal of Neurology, Neurosurgery and Psychiatry* 39:556-570.
- Meals R.A. (1977), Peroneal nerve palsy complicating ankle sprain. *Journal of Bone and Joint Surgery* 59A:966-968.
- Millesi H. (1986), The Nerve gap. *Hand Clinics* 2:651-663.
- Mababark S.J., Pedowitz R.S., Hargens A.R. (1989), Compartment syndromes. *Current Orthopaedics* 3:36-40.
- Murphy R.W. (1977), Nerve Roots and spinal nerves in degenerative disc disease. *Clinical Orthopaedics and Related Research* 126:46-60.
- Myers R., Powell H. (1981), Endoneurial fluid pressure in peripheral neuropathies. In: Hargens A. (ed), *Tissue fluid pressure and composition*. Williams & Wilkins, Baltimore.
- Nathan H. (1960), Gangliform enlargement on the lateral cutaneous nerve of the thigh. *Journal of Neurosurgery* 17:843-849.
- Nathan H. (1986), Osteophytes of the spine compressing the sympathetic trunk and splanchnic nerves in the thorax. *Spine* 12:527-532.
- Neary D., Ochoa J., Gilliat R.W. (1957), Sub-clinical entrapment neuropathy in man. *Journal of the Neurological Sciences* 24:283-298.
- Nitz A.j., Dobner J.J., Kersey D. (1985), Nerve injury and grade II and III ankle sprains. *American Journal of Sports Medicine* 13:177-182.
- Nobel W. (1966), Peroneal palsy due to haematoma in the common peroneal nerve sheaths after distal torsional fractures and inversion ankle sprain. *Journal of Bone and Joint Surgery* 48A:1484-1495
- Ochoa J., Fowler T.J., Gillat R.W. (1972), Anatomical Changes in peripheral nerve compressed by a pneumatic tourniquet. *Journal of Anatomy* 113:433-455.
- Ochoa J. (1980), Nerve fibre pathology in acute and chronic compression. In: Omer G.E., Spinner M. (eds), *Management of peripheral nerve problems*. Saunders, Philadelphia.
- Ochs S. (1975), Axoplasmic transport. In: Tower D. (ed), *The Nervous system*. Raven Press, New York, Vol.1.
- Ogata K., Naito M. (1986), Blood flow of peripheral nerve: effects of dissection, stretching and compression. *Journal of Hand Surgery* 11B: 10-14.
- Oiwa T. (1983), Experimental study on post laminectomy deterioration in cervical spondylotic myelopathy- influences if the meningeal treatment of persistent spinal cord block. *Nippon Seikegeka Gakkai Zashi* 57:577-592.
- Olsson Y., Kristensson K. (1973), The perineurium as a diffusion barrier to protein tracers following trauma to nerves. *Acta Neuropathologica* 23:105-111
- Olmarker K., Rydevik B., Holms S. (1989), Edema formed in spinal nerve roots induced by experimental graded compression. *Spine* 14:569-573.
- Ortman J.A., Zarife S., Mendell J.R. (1983), The experimental production of renaud bodies in response to mechanical stress. *Journal of the Neurological Sciences* 62:233-241.
- Pan G., Kulkarni M., Mac Dougall D. J., Miner M.E. (1988), Traumatic epidural haematoma of the cervical spine: diagnosis with magnetic resonance imaging. *Journal of Neurosurgery* 68:798-801.
- Pang D., Wilberger J.E: (1982), Tetherd cord syndrome in adults. *Journal of Neurosurgery* 57:32-47.
- Pfeffer G., Osterman A.L. (1986), Double crush syndrome: cervical radiculopathy and carpal tunnel syndrome (abstract). *Journal of Hand Surgery* 11A: 766.
- Phalen G.S. (1970), Reflection on 21 years experience with the carpal tunnel syndrome. *Journal of the American Medical Association* 212: 8: 1365-1367.

- Piersol G.A. (1907), *Human anatomy*, 3rd ed. Lippincott, Philadelphia.
- Powell H.C., Myers R.R. (1986), Pathology of experimental nerve compression. *Laboratory Investigations* 55:91-100.
- Rayan G.m., Pitha J.V., Wisdom P. et al. (1988), Histologic and electrophysiologic changes following subepineurial haematoma induction in rat sciatic nerve. *Clinical Orthopaedics and Related Research* 229:257-264.
- Robinson R.A., et al. (1977), Cervical spondylotic myelopathy: etiology and treatment concepts. *Spine* 2:89-99.
- Rydevik B. et. Al (1980), Blockage of axonal transport induced by acute graded compression of the rabbit vagus nerve. *Journal of Neurology, Neurosurgery and Psychiatry* 43:690-698.
- Rydevik B., Lundborg G., Bagge U. (1981), Effects of graded compression on intraneural blood flow. *Journal of Hand Surgery* 6:3-12.
- Rydevik B., Brown M.D., Lundborg G. (1984), Pathoanatomy and pathophysiology of nerve root compression. *Spine* 9:7-15.
- Rydevik B., Myers R.R., Powell H.C. (1989), Pressure increase in the dorsal root ganglion following mechanical compression. *Spine* 14:574-576.
- Seddon H. (1975), *Surgical disorders of the peripheral nerves*, 2nd ed. Churchill livingstone, Edinburgh.
- Selander D., Mansson L.G., Karlsson L. et al. (1985), Adrenergic vasoconstriction in peripheral nerves in the rabbit. *Anaesthesiology* 62:6-10.
- Sedal L. McLeod J.G., Walsh J.c. (1973), Ulnar nerve lesions associated with the carpal tunnel syndrome. *Journal of Neurology, Neurosurgery and Psychiatry* 36:118-123.
- Selier W.A., et al. (1983), The double crush syndrome: experimental model in the rat. *Surgical Forum* 34:596-598.
- Silver M.A., Gelberman R.H., Gellman H. et al. (1985), Carpal tunnel syndrome: associated abnormalities in ulnar nerve function and the effect of carpal tunnel release on these abnormalities. *Journal of Hand Surgery* 10A: 710-713.
- Siqueira E.B., Kranzer L.I., Dhakar D.P. (1983), Fibrosis of the dura mater: A Cause of failed back syndrome. *Surgical Neurology* 19:168-70.
- Smith K.J., McDonald W.I. (1980), Spontaneous and mechanically evoked activity due to central demyelinating lesion. *Nature* 286:154-155.
- Stodieck L.S., Luttges M.W. (1983), Protein composition and synthesis in the adult mouse spinal cord. *Neurochemical Research* 8:599-619.
- Stodieck L.S., Luttges M.W. (1986), Structural Properties of spinal nerve roots: protein composition. *Experimental Neurology* 19:41-51.
- Sunderland S. (1976), The nerve lesion in carpal tunnel syndrome. *Journal of Neurology, Neurosurgery and Psychiatry* 39:615-626.
- Sunderland S. (1978), *Nerves and nerve injuries*, 2nd ed. Churchill Livingstone, Edinburgh.
- Sunderland S. (1989), The mischievous fibroblast: friction trauma, fibrosis and adhesions. In: Jones H.M., Jones M.A., Milde M.R. (eds), *Sixth biennial conference proceedings*, Manipulative Therapists Association of Australia, Adelaide.
- Szabo R.M., Gelberman R.H., Williamson R.V., et al. (1983), Effects of systemic blood pressure on the tissue fluid threshold of peripheral nerve. *Journal of Orthopaedic Research* 1:172-178.
- Triano J.J., Luttges M.W. (1982), Nerve irritation : a possible model of sciatic neuritis. *Spine* 7:129-136.
- Turnbull I.M. (1971), Micro vasculature of the human spinal cord. *Journal of Neurosurgery* 35:141-147.
- Upton A.R.M., McComas A.J. (1973), The double crush in nerve entrapment syndromes. *Lancet* 2:359-362.

- Wall P.D., Gutnik M. (1974), Proprieties of afferent nerve impulses originating from neuroma. *Nature* 248:740-743.
- Watanabe R., Parke W.W. (1986), Vascular and neural pathology of lumbosacral spinal stenosis. *Journal of Neurosurgery* 64:64-70.
- Werner C.O., Rosen I., Thorngren K.G. (1985), Clinical and neurophysiological characteristics of the pronator syndrome. *Clinical Orthopaedics and Related Research* 197:231-236.

### Conseguenze cliniche delle lesioni del sistema nervoso

- Asbury A.K., Fields H.L. (1984), Pain due to peripheral nerve damage: an hypothesis. *Neurology (Cleveland)* 34:1587-1590.
- Bogduk N. (1983), The innervation of the lumbar spine. *Spine* 8:286-293.
- Bogduk N. (1989), The anatomy of Headache. In: Dalton M. (ed), *Proceedings of Headache and face pain symposium*, Manipulative Physiotherapists Association of Australia, Brisbane.
- Boyling J. (1988), Idiopathic scoliosis: a study of mobility, muscle length and neural tissue tension. In: *Proceedings, International Federation of Orthopaedic Manipulative Therapists Congress*, Cambridge.
- Breig A. (1978), *Adverse mechanical tension in the central nervous system*. Almqvist & Wiksell, Stockholm.
- Calvin W.H., Devor M., Howe J.F. (1982), Can neuralgias arise from minor demyelination? Spontaneous firing, mechanosensitivity and afterdischarge from conducting axons. *Experimental Neurology* 75:755-763.
- Dawson D.M., Hallet M., Millender L.H. (1983), *Entrapment neuropathies*. Little, Brown, Boston.
- Cautico W., Parker J.C., Pappert E. et al. (1988), An anatomical and clinical investigation of spinal meningeal nerves. *Acta Neurochirurgica* 90:139-143.
- Cyriax J. (1942), Perineuritis. *British Medical Journal* 570-580.
- Cyriax J. (1982), *Textbook of Orthopaedic Medicine*, 8th ed. bailliere Tindall, London, Vol. 1.
- Devor M. (1985), The pathophysiology and anatomy of damaged nerve. In: Wall P.D., Melzack R. (eds), *Textbook of pain*. Churchill livingstone, Edinburgh.
- Edgar M.A., Nundy S. (1966), Innervation of the spinal dura mater. *Journal of Neurology, Neurosurgery and Psychiatry* 29:530-534.
- Edgar M.A., Park W.M. (1974), Induced pain pattern on passive straight leg raising in lower lumbar disc protrusion. *Journal of Bone and Joint Surgery* 56B: 658-667.
- Edwards B.E. (1987), clinical assessment: the use of combined movements in assessment and treatment. In: Twomey L.T., Tylor J.R. (eds), *Clinics in physical therapy*, Vol. 13, *Physical therapy of the low back*. Churchill Livingstone, New York.
- Edwards B.E. (1988), Combined movement of the cervical spine in examination of treatment. In: Grant R. (ed), *Clinics in physical therapy*, Vol. 17, *Physical therapy of the cervical and thoracic spine*. Churchill Livingstone, New York.
- El Mahdi M.A., Latif F.Y.A., Janko M. (1981), The spinal nerve root innervation, and a new concept of the clinicopathological interrelations in back pain and sciatica. *Neurochirurgica* 24:137-141.
- Elvey R.L. Quintner J.L. Thomas A.N. (1986), A clinical study of RSI. *Australian Family Physician* 15:1314-1319.
- Granit R., Skoglund C.R. (1945), Facilitation, inhibition and depression at the artificial synapse formed by the cut end of mammalian nerve. *Journal of Physiology* 103:435-448.
- Howe J.F., Calvin W.H., Loeser J.D. (1976), Impulses reflected from dorsal root ganglia and from focal nerve injuries. *Brain Research* 116:139-144.



- Howe J.F., Loeser J.D., Calvin W.H. (1977), Mechanosensitivity of dorsal root ganglia and chronically injured axons: a physiological basis for the radicular pain of nerve root compression. *Pain* 3:25-41.
- Janda V. (1978), Muscles, Central nervous regulation and back problems. In: Korr I.M. (ed), *Neurobiologic mechanisms in manipulative therapy*. Plenum, New York.
- Janda V. (1986) Muscle weakness and inhibition (pseudoparesis) in low back pain syndromes. In: Grieve G.P. (ed), *Modern manual therapy of the vertebral column*. Churchill Livingstone, Edinburgh.
- Kopell H.P., Thompson W.A.L. (1963), *Peripheral entrapment neuropathies*. Williams & Wilkins, Baltimore.
- Kornberg C., Lew P. (1989), The effects of stretching neural structures on grade I musculi ischiotibiali injuries. *Journal of Orthopaedic and Sports Physical Therapy*. June:481-487.
- Lansche W.E., Ford L.T. (1960), Correlation of the myelogram with the clinical and operative findings in lumbar disc lesions. *Journal of Bone and Joint Surgery* 42A:193-206.
- Loeser J.D. (1985), Pain due to nerve injury. *Spine* 10:232-235.
- Mackinnon S.E., Dellon A.L. (1988), *Surgery of the peripheral nerve*. Thieme, New York.
- Macnab I. (1972), The mechanism of spondylogenic pain. In: Hirsch C. Zotterman Y. (eds), *Cervical pain*. Pergamon, Oxford.
- Maitland G.D. (1986), *Vertebral manipulation*, 5th ed. Butterworths, London.
- Maitland G.D. (1990) *Peripheral manipulation*, 3rd ed. Butterworths, London.
- Melio C., Cioni B., Del Lago A. et al. (1981), Pain control and improvement of peripheral blood flow following spinal cord stimulation. *Journal of Neurosurgery* 54:821-823.
- Melzack R., Wall P.D. (1965), Pain mechanisms: a new theory. *Sciences* 150:971-978.
- Murphy R.W. (1977), Nerve roots and spinal nerves in degenerative disc disease. *Clinical Orthopaedics and Related Research* 129:46-60.
- Noordenbons W. (1959), *Pain*. Elsevier, Amsterdam.
- Nordin M, Nystrom B., Wallin U. et al. (1984), Ectopic sensory discharges and paresthesiae in patients with disorders of peripheral nerves, dorsal roots and dorsal columns. *Pains* 20:231-245.
- Ochoa J., Torebjork H.W. (1981), Paraesthesiae from ectopic impulse generation in human sensory nerves. *Brain* 103:835-853.
- Pratt N.E. (1986), Neurovascular entrapments in the region of the shoulder and posterior triangle of the neck. *Physical Therapy* 66:1894-1900.
- Quintner J.L. (1989), A study of upper limb pain and paraesthesiae following neck injury in motor vehicle accidents: assessment of the brachial plexus tension test of Elvey. *British Journal of Rheumatology* 28:528-533.
- Splys R., Mackinnon S.E., Dellon A.L. (1987), The relationship between nerve entrapment versus neuroma complications and the misdiagnosis of the Quervain's disease. *Contemporary Orthopaedics* 15:51-57.
- Smyth M.J., Wright V. (1985), Sciatica and the intervertebral disc: an experimental study. *Journal of Bone and Joint Surgery* 40A:1401-1418.
- Sunderland S. (1978) *Nerves and nerve injuries*. Churchill Livingstone, Edinburgh.
- Sweeney J.E., Harms A.D. (1990), Hand Hypersensitivity and the upper limb tension test: another angle. *Pain (Suppl)* 5,S466.
- Sweet W.H. (1988), Deafferentation pain in man. *Applied Neurophysiology* 51:117-127.
- Thomas P.K. (1982), Pain in peripheral neuropathy: clinical and morphological aspects. In: Culp W.J., Ochoa J. (eds), *Abnormal nerves and muscles as impulse generators*. Oxford University Press.
- Torg J.S., Pavlov H., Genuario S.E. et al. (1986), Neuropraxia of the cervical spinal cord with transient quadriplegia. *Journal of Bone and Joint Surgery* 68A: 1354-1370.

- Wall P.D., Gutnik M. (1974), Properties of afferent nerve impulses originating from a neuroma. *Nature* 248:740-743.
- Wall P.D., Melzack R. (1985), *Textbook of pain*. Churchill Livingstone, Edinburgh.
- Wolff C.J. (1987), Physiological, inflammatory and neuropathic pain. *Advances in Technical Standards in Neurosurgery* 15:39-62.

## Ragionamento clinico

- Barrows H.S., Feltovich P.J. (1987), The clinical reasoning process. *Medical Education* 21:86-91.
- Barrows H.S., Tamblyn R.M. (1980), *Problem-based learning: an approach to medical education*. Springer, New York.
- Chase W.G., Simon H.A. (1973), Perception in chess. *Cognitive psychology* 4:55-81.
- Chi M.T., Feltovich P.J., Glaser R. (1981), Categorization and representation of physics problems by experts novices. *Cognitive Psychology* 5:121-152.
- Chi M.T., Glaser R, Farr M.J. (1988), *The nature of expertise*. Lawrence Erlbaum Associates, Hillsdale.
- Citron N., Edgar M.A., Sheehy J. et al. (1984), Intramedullary spinal cord tumours presenting as scoliosis. *Journal of Bone and Joint Surgery* 66B:513-517.
- Corrigan R., Maitland G.D. (1983), *Practical orthopaedic medicine*. Butterworths, London.
- DeGroot A.D. (1965), *Thought and choice in chess*. Basic Books, New York.
- Elstein A.S., Shulman L.S., Sprafka S.S. (1978), *An analysis of clinical reasoning*. Harvard, Cambridge.
- Elvey R.L. (1986), Treatment of arm pain associated with abnormal brachial plexus tension. *Australian Journal of Physiotherapy* 32:225-230.
- Feltovich P.J., Johnson P.E., Moller J.H., Swanson D.B. (1984), LCS: The role and development of medical knowledge in diagnostic expertise. In: Clancey W.J., Shortliffe E.H. (eds), *Readings in medical artificial intelligence: The first decade*. Addison-Wesley, Reading.
- Grant R. (1988), Dizziness testing and manipulation of the cervical spine. In: Grant R. (ed), *Physical therapy of the cervical and thoracic spine: Clinics in physical therapy 17*. Churchill Livingstone, New York.
- Grant R. (1988), Jones M., Maitland G.D. (1988), Clinical decision making in upper quadrant dysfunction. In: Grant R. (ed), *Physical therapy of the cervical and thoracic spine: Clinics in physical therapy 17*. Churchill Livingstone, New York.
- Grieve G.P. (1981), *Common vertebral joint problems*. Churchill Livingstone, Edinburgh.
- Hopkins A., Rudge P. (1973), Hyperpathia in the central cervical cord syndrome. *Journal of Neurology, Neurosurgery and Psychiatry* 36:637-642.
- Kleinmuntz B. (1968), The processing of clinical information by man and machine. In: Kleinmuntz B. (ed), *The formal representation of human judgements*. John Wiley, New York.
- Mackinnon S.E., Dellon A.L. (1988), *Surgery of the peripheral nerve*. Thieme, New York.
- Maitland G.D. (1978), Movement of pain sensitive structures in the vertebral canal in a group of physiotherapy students. In: *Proceedings, Inaugural congress of the Manipulative Therapists Association of Australia*, Sydney.
- Maitland G.D. (1986), *Vertebral Manipulation*, 5th ed. Butterworths, London.
- Massey E.W., Riley T.L., Pleet A.B. (1981), Co-existent carpal tunnel syndrome and cervical radiculopathy (double crush syndrome). *Southern Medical Journal* 74:957-959
- Muzzin L.J., Norman G.R., Feightner J.W., Tugwell P., Guyatt G. (1983), Expertise in recall of clinical protocols in two speciality areas. *Proceedings 22nd Conference on Research in Medical Education*, Washington 11-127.

- Pang D., Wilberger J.E. (1982), Tethered cord syndrome in adults. *Journal of Neurosurgery* 57:32-47.
- Patel V.L., Frederiksen C.H. (1984), Cognitive processes in comprehension and knowledge acquisition by medical students and physicians. In: Schmidt J.G., De Volder M.L. (eds), *Tutorials in problem-based learning*. Van Borcum, Assen/Maastricht.
- Patel V.L., Groen G.J., Frederiksen C.H. (1986), Differences between medical students and doctors in memory for clinical cases. *Medical Education* 20:3-9.
- Sunderland S. (1978), *Nerves and nerve injuries*. Churchill Livingstone, Edinburgh.
- Torg J.S., Pavlov H., Genuario S.E. et al. (1986), Neuropraxia of the cervical spinal cord with transient quadriplegia. *Journal of Bone and Joint Surgery* 68A: 1354-1370
- Trott P. (1985), Differential mechanical diagnosis of shoulder pain. *Proceedings Manipulative Therapists Association of Australia, 4th biennial conference*, Brisbane.

### **I test di tensione- Arti inferiori e tronco**

- Beasley A.W. (1982), The origin of orthopaedics. *Journal of the Royal Society of Medicine* 75:648-655.
- Borges L.F., Hallet M., Selkoe D.J., Welch K. (1981), The anterior tarsal tunnel syndrome. *Journal of Neurosurgery* 54:89-92.
- Breig A., Marions O. (1963), Biomechanics of the lumbosacral nerve roots. *Acta Radiologica* 4:602-604.
- Breig A., Troup J.D.G. (1979), Biomechanical considerations in the straight-leg-raising test. *Spine* 4:242-245.
- Breig A. (1978), *Adverse mechanical tension in the central nervous system*. Almqvist & Wiksell, Stockholm.
- Butler D.S. (1985), The effects of age and gender on the slump test. Unpublished thesis, South Australian Institute of Technology, Adelaide.
- Christodoulides A.N. (1989), Ipsilateral sciatica on femoral nerve stretch test in pathognomonic of an L4/5 disc protrusion. *Journal of Bone and Joint Surgery* 71B:81-86.
- Corrigan B., Maitland G.D. (1983), *Practical orthopaedic medicine*. Butterworths, London.
- Cyriax J. (1942), Perineuritis. *British Medical Journal* 578-580.
- Cyriax J. (1978), *Textbook of orthopaedic medicine*, 7th ed. Baillierre Tindall, London, Vol. 1.
- Davidson S. (1987), Prone Knee bend: an investigation into the effect of cervical flexion and extension. In: Dalziel B.A., Snowsill J.C. (eds), *Proceedings of the Manipulative Therapists Association of Australia, 5th Biennial Conference*, Melbourne.
- Dyck P. (1976), The femoral nerve traction test with lumbar disc protrusion. *Surgical Neurology* 6:163-166.
- Dyck P. (1984), Lumbar nerve root: the enigmatic eponyms. *Spine* 9:3-6.
- Estridge M.N., Rouhe S.A., Johnson N.G. (1982), The femoral stretching test. *Journal of Neurosurgery* 57:813-817.
- Gifford L. (1987), Circadian variation in human flexibility and grip strength. In: Dalziel B.A., Snowsill J.C. (eds), *Fifth biennial conference proceedings*, Manipulative Therapists Association of Australia, Melbourne.
- Grant A. (1983), The slump test. Unpublished thesis, South Australia Institute of Technology, Adelaide.
- Grieve G.P. (1981), *Common vertebral joint problems*. Churchill Livingstone, Edinburgh.
- Hudings W.R. (1979), The crossed straight leg raising test: a diagnostic sign of herniated disc. *Journal of Occupational Medicine* 21:407-408.
- Inman V.T., Saunders J.B. (1942), The clinico-anatomical aspects of the lumbosacral region. *Radiology* 38:669-678.

- Khuffash B., Porter R.W. (1989), Croos leg pain and trunk list. *Spine* 602-603.
- Leung A.L. (1983), Effects of cervical lateral flexion on the slump test in normal young subjects. Unpublished thesis, South Australian Institute of Technology, Adelaide.
- Lew P.C. (1979), The straight leg raise and lumbar stiffness. Unpublished thesis, South Australian Institute of Tecnology, Adelaide.
- Lew P.C., Puentedura E.J. (1985), The straight-leg-raise test and spinal posture. In: *Proceedings Fourth Biennial Conference* , Manipulative Therapists Association of Australia, Brisbane.
- Macnab I (1971), Negative disc exploration. *Journal of Bone and Joint Surgery* 53A:891-903.
- Macnabi (1977), *Backache*. Williams & Williams, Baltimore.
- Maitland G.D: (1979), Negative disc exploration: positive canal signs. *Australian Journal of Physiotherapy* 25:129-134.
- Maitland G.D. (1986), *Vertebral manipulation*, 5th ed. Butterworths, London.
- Massey A.E. (1985), Movement of pain sensitive structures in the neural canal. In: Grieve G.P. (ed), *Modern manual therapy of the vertebral column*. Churchill Livingstone, Edinburgh.
- McLaughlin A. (1989), Combined slump tests. Unpublished thesis, South Australian Institute of Technology, Adelaide.
- Miller A.M. (1987), Neuro-meningeal limitation of straight leg raising. In: Dalziel B.A: Snowsill J.C. (eds), *Fifth biennial conference*, Manipulative Therapists Association of Australia, Melbourne.
- Nobel W. (1966), Peroneal palsy due to hematoma in the common peroneal nerve sheat after distal torsional fractures and inversion ankle sprains. *Journal of Bone anf Joint Surgery* 48A:1484-1495.
- O'Connel J.E.A. (1946), The clinical signs of meningeal irritation. *Brain* LXIX:9-21.
- O'Connel J.E.A. (1943), Sciatica and the mechanism of the production of the clinical syndrome in protrusions of the lumbar intervertebral discs. *British Journal of Surgery* 30:315-327.
- Salter H. (1989), The effect of foot position on the SLR responses. In: Jones H., Jones M.A., Milde M. (eds), *Sixth biennial conference*, Manipulative Therapists Association of Australia, Adelaide.
- Styf J.R. (1988), Diagnosis of exercises induced pain in the anterior aspect of the lower leg. *American Journal of Sports Medicine* 16:165-169.
- Sunderland S. (1978), *Nerves and nerve injuries*, 2nd ed. Churchill Livingstone, Edinburgh.
- Sutton J.L. (1979), the straight leg raising test. Unpublished thesis, South Australian Institute of Technology, Adelaide, Australia.
- Sweetham B., Anderson J.A., Dalton E.R. (1974), The relationships between little finger mobility, lumbar mobility, straight leg raising and low back pain. *Rheumatology and Rehabilitation* 13:161-166.
- Tencer A.F., Allen B.L., Ferguson R.L. (1985), A biomechanical study of thoracolumbar spine fractures with bone in the canal, Part III. *Spine* 10:741-749.
- Troup J.D.G. (1981), Straight-leg-raising (SLR) and the qualifying tests for increased root tension. *Spine* 6:526-527.
- Troup J.G.D. (1986), Biomechanics of the lumbar spinal canal. *Clinical Biomechanics* 1:31-43.
- Urban L.M. (1985), The straight leg raising test: a review. In: Grieve G.P. (ed), *Modern manual therapy of the vertebral column*. Churchill Livingstone, Edinburgh.
- Woodhall B., Hayes G.J. (1950), The well leg raising test of Fajersztajn in the diagnosis of ruptered intervertebral disc. *The Journal of Bone and Joint Surgery* 32A:786-792.

## I test di tensione – Arti superiori

- Bell A. (1987), The upper limb tension test and straight leg raising. In: Dalziell B.A., Snowsill J.C. (eds), *Proceedings 5th biennial conference*, Manipulative Therapists Association of Australia, Melbourne.
- Buehler M.J., Thayer D.T. (1988), The elbow flexion test: a clinical test for the cubital tunnel syndrome. *Clinical Orthopaedics and Related Research* 233:213-216.
- Butler D.S. (1987), The concept and treatment of adverse mechanical tension in the nervous system – application to repetition strain injury. In: Dalziell B.A., Snowsill J.C. (eds), *5th biennial conference*, Manipulative Therapists Association of Australia, Melbourne.
- Chavany J.A. (1934), A propos des neuralgies cervicobrachiales. *Bulletin Medical (Paris)* 48:335-339.
- Cyriax J. (1978), *Textbook of orthopaedic medicine*, 7th ed. Bailliere Tindall, London, Vol. 1.
- Davidson R.I., Dunn E.J., Metzmaker J.N. (1981), The shoulder abduction test in the diagnosis of radicular pain in cervical extradural compressive monoradiculopathies. *Spine* 6:441-445.
- Elvey R.L. Painful restriction of shoulder movement: a clinical observational study. In: *Proceedings, Disorders of the knee, ankle and shoulder*. Western Australia Institute of Technology, Perth.
- Elvey R.L. (1986), Treatment of arm pain associated with abnormal brachial plexus tension. *Australia Journal of Physiotherapy* 32:224-229
- Elvey R.L., Quintner J.L., Thomas A.N. (1986), A clinical study of RSI. *Australian Family Physician* 15:1314-1322.
- Fardy E. (1985), The upper limb tension test: an investigation of responses to the upper limb tension test and the effect of passive movement of the head in sagittal and coronal planes in young asymptomatic subjects. Unpublished thesis, South Australian Institute of technology, Adelaide.
- Frykolm R. (1951), Cervical nerve root compression resulting from disc degeneration and root-sleeve fibrosis: a clinical investigation. *Acta Chirurgica Scandinavica (Suppl)* 160:1-149.
- Ginn K. (1989), An investigation of tension development in upper limb soft tissues during the upper limb tension test. In: *Proceedings, International Federation of Orthopaedic Manipulative Therapists, Congress*, Cambridge.
- Kenneally M. Rubenach H. Elvey R. (1988), The upper limb tension test: The SLR test of the arm. In: Grant R. (ed), *Physical therapy of the cervical and thoracic spine, Clinics in physical therapy* 17. Churchill Livingstone, Edinburgh.
- Kenneally M (1985), The upper limb tension test. In: *Proceedings, 4th biennial conference*, Manipulative Therapists Association of Australia, Brisbane.
- Landers J. (1987), The upper limb tension test. In: Dalziell B.A., Snowsill J.C. (eds), *Proceedings 5th biennial conference*, Manipulative therapists Association of Australia, Melbourne.
- Lord J.W., Roseti L.M. (1971), Thoracic outlet syndromes. In: *CIBA Clinical Symposia* 23:20-23.
- Maitland G.D. (1977) *Vertebral manipulation*, 4th ed. Butterworths, London.
- McLaughlin A. (1989), Combined slump tests. Unpublished thesis, South Australian Institute of Technology, Adelaide.
- Pechan (1973), Ulnar nerve manoeuvre as a diagnostic aid in its pressure lesions in the cubital region. *Ceskoslovenska Neurologie* 36:13-19.
- Pullons J. (1986), The upper limb tension test. *Australian Journal of Physiotherapy* 32:258-259.

- Quintner J.L. (1989), A study of upper limb pain and paraesthesiae following neck injury in motor vehicle accidents: assessment of the brachial plexus tension test of Elvey. *British Journal of Rheumatology* 28:528-533.
- Rubvenach H. (1985), The upper limb tension test: the effect of the position and movement of the contralateral arm. In: *Proceedings, 4th biennial conference*, Manipulative Therapists Association of Australia, Brisbane.
- Selvaratnam P.J., Glasgow E.F., Matsyas T. (1989), Differential strain produced by the brachial plexus tension test on C5 to T1 nerve roots. In: Jones H.M.; Jones M.A, Milde M.R. (eds), *Sixth biennial conference proceedings*, Manipulative Therapists Association of Australia, Adelaide.
- Smith C.G. (1956), Changes in length and posture of the segments of the spinal cord with changes in posture in the monkey. *Radiology* 66:259-265.
- Sweeney J.E., Harms A.D. (1990), Hand Hypersensitivity and the upper limb tension test: another angle. *Pain* (Suppl) 5, S466.
- Young L. (1989), The upper limb tension test response in a group of post Colle's fractures patients. Unpublished thesis, South Australian Institute of Technology, Adelaide.

### **Applicazione e analisi dei vari tests**

- Asbury A.H., Fields H.L. (1984), Pain due to peripheral nerve damage: an hypothesis. *Neurology* (Cleveland) 34:1587-1590.
- Buehler M.J., Thayer D.T. (1988), The elbow flexion test: a clinical test for the cubital tunnel syndrome. *Clinical Orthopaedics and Related Research* 233:213-216.
- Butler D.S. (1989), Adverse mechanical tension in the nervous system: a model for assessment and treatment. *Australian Journal of Physiotherapy* 35:227-238.
- Chino N. (1981), Electrophysiological investigation on shoulder subluxation in hemiplegics. *Scandinavian Journal of Rehabilitation Medicine* 13:17-21.
- Clare H.A. (1989), The clinical testing of upper limb neural tissue in repetitive strain injury. In: Jones H.M., Jones M.A., Milde M.R. (eds), *Sixth biennial conference proceedings*, Manipulative Therapists Association of Australia, Adelaide.
- Cyriax J, Russell G. (1977), *Textbook of orthopaedic medicine*, 9th ed. Bailliere Tindall, London, Vol. 2.
- Elvey R.L. (1986), Treatment of arm pain associated with abnormal brachial plexus tension. *Australian Journal of Physiotherapy* 32:225-230.
- Faithfull D.K., Moir D.H., Ireland J. (1985), The micro pathology of the typical carpal tunnel syndrome. *Journal of Hand Surgery* 11B:131-132.
- Jewett D.L. (1980), Functional blockade of impulse trains caused by acute nerve compression. In: Jewett D.L., McCarroll H.R. (eds), *Nerve repair and regeneration*. Mosby, St. Louis.
- Kenneally M., Rybenach H., Elvey R. (1988), The upper limb tension test: the SLR test of the arm. In Grant R (ed), *Clinics in Physical Therapy* 17, *The cervical and thoracic spines*. Churchill Livingstone. New York.
- Lundborg G. (1988), *Nerve injury and repair*. Churchill Livingstone, Edinburgh.
- Lundborg G., Rydevik B. (1973), Effects of stretching the tibial nerve of the rabbit: a preliminary study on the intraneural microcirculation and the barrier function of the perineurium. *Journal of Bone and Joint Surgery* 55B:390-401.
- Mackinnon S.E., Dellon A.L. (1986), Experimental study of chronic nerve compression. *Hand Clinics* 2:639-650.
- Mackinnon S.E.; Dellon A.L. (1988), *Surgery of the peripheral nerve*. Thieme, New York.
- Maitland G.D. (1986), *Vertebral manipulation*, 5th ed. Butterworths, London.
- Millesi H. (1986), The nerve gap: theory and clinical practice. *Hand Clinics* 2:651-663.

- Mubarak S.J., Pedowitz R.A., Hargens A.R. (1989), Compartment syndrome. *Current Orthopaedics* 3:36-40.
- Nitz A.J., Dobner J.J., Kersey D. (1985), Nerve injury and grade II and III ankle sprains. *American Journal of Sports Medicine* 13:177-182.
- Noordenbos W. (1959), Pain. Elsevier, Amsterdam.
- Ogata K., Naito M. (1985), Blood flow of peripheral nerve, effects of dissection, stretching and compression. *Journal of Hand Surgery* 11B:11-14.
- Peterson G.W., Will A.D. (1988), Newer electrodiagnostic techniques in peripheral nerve injuries. *Orthopaedic Clinics of North America* 19:13-25.
- Philip K., Lew P., Matyas T.A. (1989), The inter-therapists reliability of the slump test. *Australian Journal of Physiotherapy* 35:89-94.
- Rydevik B., Brown M.D., Lundborg G. (1984), Pathoanatomy and pathophysiology of nerve root compression. *Spine* 9:7-15.
- Saal J.A., Dillingham M.F., Gamburd R.S., Fanton S.S. (1988), The pseudoradicular syndrome. *Spine* 13:926-930.
- Seddon H. (1943), Three types of nerve injury. *Brain* 66:237-288.
- Stone L., Kennan M.E. (1988), Peripheral nerve injuries in the adult with traumatic brain injury. *Clinical Orthopaedics and Related Research* 233:136-144.
- Sunderland S. (1951), A classification of peripheral nerve injuries producing loss of function. *Brain* 74:491-516.
- Sunderland S. (1976), The nerve lesion in carpal tunnel syndrom. *Journal of Neurology, Neurosurgery and Psychiatry* 39:615-616.
- Sunderland S. (1978), *Nerves and nerve injuries*, 2nd ed. Churchill Livingstone, Edinburgh.
- Thomas P.K. (1984), Clinical Features and differential diagnosis. In: Dyck P.J., Thomas P.K., Lambert E.H., Bunge R. (eds), *Peripheral Neuropathy*, 2nd ed. Saunders, Philadelphia, Vol. 2.
- Torg J.S., Pavlov H., Genuario S.E. et al. (1986), Neuropraxia of the cervical spinal cord with transient quadriplegia. *Journal of Bone and Joint Surgery* 68A:1354-1370.
- Triano J.J., Luttges M.W. (1982), Nerve irritation: a possible model of sciatic neuritis. *Spine* 7:129-136.

### **Impostazione del Trattamento**

- Aubrey J.B., Dobbs A.R., Rule B.G. (1989), Laypersons' knowledge about the sequelae of minor head injury and whiplash. *Journal of Neurology, Neurosurgery and Psychiatry* 52:842-846.
- Bora F.W., Richardson S., Black J. (1980), The biomechanical responses to tension in a peripheral nerve. *Journal of Hand Surgery* 5:21-25.
- Cavafy J. (1881), A case of sciatic nerve- stretching in locomotor ataxy: with remarks on the operation. *British Medical Journal* Dec 17:973-974.
- Dahlin L.B., Lundborg G. (1990), The neurone and its response to peripheral nerve compression. *Journal of Hand Surgery* 15B: 5-10.
- Farragher D., Kidd G.L. (1987), Eutrophic electrical stimulation for Bell's palsy. *Clinical Rehabilitation* 1:265-271.
- Heumann R., Korsching S., Bandtlor C. et al. (1987), Changes of nerve growth factor synthesis in nonneuronal cells in response to sciatic nerve transection. *Journal of Cell Biology* 104:1623-1631.
- Kenneally M., Rubenach H., Elvey R. (1988), The upper limb tension test: the SLR test of the arm. In: Grant R. (ed), *Physical therapy of the cervical and thoracic spine, Clinics in Physical Therapy* 17, Churchill Livingstone, New York.
- Kornberg C., Lew P. (1989), The effect of stretching neural structures on grade I muscoli

- ischiotibiali injuries. *Journal of Orthopaedic and Sports Physical Therapy*. June:481-487.
- Korr I.M. (1985), Neurochemical and neurotrophic consequences of nerve deformation. In: Glasgow E.F. et al. (eds), *Aspects of Manipulative Therapy*, 2nd ed. Churchill Livingstone, Melbourne.
  - Lundborg G. (1988), *Nerve injury and repair*. Churchill Livingstone, Edinburgh.
  - Magarey M.E: (1985), Selection of passive treatment techniques. In: *Proceedings fourth biennial conference*, Manipulative Therapists Association of Australia, Brisbane.
  - Maitland G.D. (1977), *Peripheral manipulation*, 2nd ed. Butterworths, London.
  - Maitland G.D. (1986), *Vertebral manipulation*, 5th ed. Butterworths, London.
  - Marshall J. (1883), On nerve stretching for the relief or cure of pain. *British Medical Journal* 2:1173-1179.
  - McGuckin N. (1986), The T4 syndrome. In: Grieve G.P. (ed), *Modern manual therapy of the vertebral column*. Churchill Livingstone, Edinburgh.
  - McLellan D.C., Swash M. (1976), Longitudinal sliding of the median nerve during movements of the upper limb. *Journal of Neurology, Neurosurgery and Psychiatry* 39:556-570.
  - Nathan H. (1986), Osteophytes of the spine compressing the sympathetic trunk and splanchnic nerves in the thorax. *Spine* 12:527-532.
  - Ramamurthi B. (1980), Absence of limitation of straight leg raising in proved lumbar disc lesion. *Journal of Neurosurgery* 52:852-853.
  - Selander D., Mansson L.G., Karlsson L. et. al. (1985), Adrenergic vasoconstriction in peripheral nerves in the rabbit. *Anesthesiology* 62:6-10.
  - Symington J. (1882), The physics of nerve stretching. *British Medical Journal* 1:770.

### **Disturbi da tensione del SNP anomala negli arti**

- Aro H. et al. (1988), Late compression neuropathies after Colles' fracture. *Clinical Orthopaedics and Related Research* 233:217-225.
- Barret P.G. (1987), The muscoli ischiotibiali injury in footballers. Unpublished thesis, South Australian Institute of Technology, Adelaide.
- Barton N. (1989), Repetitive strain disorder. *British Medical Journal* 229:405-406.
- Borges L.F., Hallett M., Selkoe D.J., Welc K. (1981), The anterior tarsal tunnel syndrome. *Journal of Neurosurgery* 54:89-92.
- Bourke A., Alchin C., Little K., et al. (1986), Hamstring symptoms and lumbar spine relationship in sports people: a pilot study. *Proceedings of the Australian Physiotherapy Association National Conference*, Hobart.
- Cannon L.J., Bernacki E.J., Walter S.D. (1981), Personal and occupational factors associated with carpal tunnel syndrome. *Journal of occupational Medicine* 23:255-258.
- Chatterjee D.S. (1987), Repetition strain injury: a recent review. *Journal of the Society of Occupational Medicine* 37:100-105.
- Chatterjee D.S., Barwick D.D., Petrie A. (1982), Exploratory electromyography in the study of vibration-induced white finger in rock drillers. *British Journal of Industrial Medicine* 39:89-97.
- Cherington M. (1986), Surgery for the thoracic outlet syndrome? *New England Journal of Medicine* 314:322.
- Cherington M., Happer I., Machanic B. et al. (1986), Surgery for the thoracic outlet syndrome may be hazardous for your health. *Muscle&Nerve* 9:632-634.
- Cooney W.P., Dobyns J.H., Linscheid R.L. (1980), Complications of Colles' fractures. *Journal of Bone and Joint Surgery* 62A:613-619.
- Dawson D.M., Hallett M., Millender L.H. (1983), *Entrapment neuropathies*. Little, Brown, Boston.



- Dellon A.L., Mackinnon S.E. (1984), Tibial nerve branching in the tarsal tunnel. *Archives of Neurology* 41:645-646.
- Dellon A.L., Mackinnon S.E. (1984), Susceptibility of the superficial sensory branch of the radial nerve to form painful neuromas. *Journal of Hand Surgery* 9B: 42-45.
- Edelson E.G. (1986), Meralgia paraesthetica: an anatomical interpretation. *Journal of Bone and Joint Surgery* 58A:284.
- Edwards W.C., La Rocca H. (1983), The developmental segmental sagittal diameter of the cervical spinal canal in patients with cervical spondylosis. *Spine* 8:20-27.
- Elvey R.L., Quintner J.L., Thomas A.N. (1986), a clinical study of RSI. *Australian Family Physician* 15:1314-1319.
- Faithfull D.K., Moir D.H., Ireland J. (1986), The micro pathology of the typical carpal tunnel syndrome. *Journal of Hand Surgery* 11B:131-132.
- Ferguson D.A. (1987), RSI: putting the epidemic to rest. *Medical Journal of Australia* 147:213-214.
- Finkelstein H. (1930), Stenosing tenovaginitis at the radial styloid process. *Journal of Bone and Joint Surgery* 12A:509-539.
- Fry J.H. (1986), Overuse syndrome in the upper limb in musicians. *Medical Journal of Australia* 144:182-185.
- Frykman G. (1967), Fracture of the distal radius including sequelae: shoulder-hand-finger syndrome, disturbance in the distal radioulnar joint and impairment of nerve function: a clinical and experimental study. *Acta Orthopaedica Scandinavica* (Suppl) 108:1-155.
- Gelberman R.H., Hergenroeder P.T., Hargens A.R. et al. (1981), The carpal tunnel syndrome: a study of carpal tunnel pressures. *Journal of Bone and Joint Surgery* 63A:380-383.
- Gessini L., Jandolo B., Pietrangeli A. (1984), The anterior tarsal tunnel syndrome. *Journal of Bone and Joint Surgery* 66A:786-787.
- Guo-Xiang J., Wei-Dong X., Ai Hao W. (1988), Spinal stenosis with meralgia paraesthetica. *Journal of Bone and Joint Surgery* 70B: 272-273.
- Hargens A.R. (1989), Measurement of tissue fluid pressure as related to nerve compression syndromes. In: Szabo R.M. (ed), *Nerve compression syndromes*. Slack, Thorofare.
- Herbinson G.J., Teng C., Martin J.H., Ditunno J.F. (1973), Carpal tunnel syndrome in rheumatoid arthritis: a preliminary study. *American Journal of Physical Medicine* 52:68-74.
- Holmes W., Young J.Z. (1942), Nerve regeneration after immediate and delayed suture. *Journal of Anatomy* 77:63-93.
- Ireland D.C.R. (1988), Psychological and physical aspects of occupational arm pain. *Journal of Hand Surgery* 13B:5-10.
- Jefferson D., Eames R.A. (1979), Subclinical entrapment of the lateral femoral cutaneous nerve: an autopsy study. *Muscle & Nerve* 2:145-154.
- Kenzora J.E. (1984), Symptomatic incisional neuromas on the dorsum of the foot. *Foot and Ankle* 5:2-15.
- Kongsholm J., Olerud C. (1986), Carpal tunnel pressure in Colles' fracture. *Acta Orthopaedica Scandinavica* 57:258-259.
- Kopell H.P., Thompson W.A.L. (1963), *Peripheral entrapment neuropathies*. Williams & Wilkins, Baltimore.
- Kopell H.P., Thompson W.A.L. (1960), Peripheral entrapment neuropathy of the lower extremity. *New England Journal of Medicine* 262:56-60.
- Kornberg C.M. (1987), The incidence of positive slump in Australia rules football players with grade I musculi ischiotibiali strain. *Proceedings of the 10th International Congress, WCPT, Book II, Sydney*.
- Kornberg C.M., Lew P. (1989), The effect of stretching neural structures on grade I musculi ischiotibiali injuries. *Journal of Orthopaedic and Sports Physical Therapy*, June:481-487.

- Kosinski C. (1926), The course , mutual relations and distribution of the cutaneous nerves of the metagonal region of the leg and foot. *Journal of Anatomy* 60:274-279.
- Lakei M.D. , Auclino P.L. (1986), Anomalousmuscles associated with compression neuropathies. *Orthopaedic Review* 15(4):19-28.
- Lassman G., Lassman H., Stockinger L. (1976), Morton's metatarsalgia: light and electro microscopic observations and their relation to entrapment neuropathies. *Virchow's Arch (A)* 370:307-321.
- Lincheid R.L. (1965), Injuries to the radial nerve at the wrist. *Archives of Surgery* 91:942-946.
- Loeser J.D. (1985), Pain due to nerve injury. *Spine* 10:232-235.
- Lundborg G. (1988), Nerve injury and repair. Churchill Livingstone, Edinburgh.
- Mackinnon S.E., Dellon A.L. (1988), *Surgery of the peripheral nerve*. Thieme, New York.
- Maitland G.D. (1977), *Peripheral manipulation*, 2nd ed. Butterworths, London.
- Maitland G.D. (1986), *Vertebral manipulation*, 5th ed. Butterworths, London.
- Maitland G.D. (1991), *Peripheral manipulation*, 3rd ed. Butterworths, London.
- Marinacci A.A. (1968), Neurological syndrome of the tarsal tunnels. *Bulletin of the Los Angeles Neurological Society* 33:90-100.
- Massey E.W. (1978), Carpal tunnel syndrome in pregnancy. *Obstetrical and Gynaecological Survey* 33:145-154.
- Massey E.W.. Pleet A.B. (1978), Hancuffs and cheiralgia paraesthetica. *Neurology* 28:1312-1313.
- Mauhart D. (1989), The effect of chronic inversion ankle sprains on the plantarflexion/inversion straight leg raise test. Unpublished thesis, South Australian Institute of Technology, Adelaide.
- McDermott F.T: (1986), Repetition strain injury: a rewiev of current understanding. *Medical Journal of Australia* 144:196-200.
- Meals R.A., Payne W., Gaines R. (1988), Functional demands and consequences of manual communication. *Journal of Hand Surgery* 13(A):686-691.
- Millesi H., Meissl G. (1981), Consequences of tension at the suture line. In: Gorio A., Millesi H., Mingrino S. (eds), *Post traumatic peripheral nerve regeneration: experimental basis and clinical implications*. Raven Press, New York.
- Murphy J.P. (1974), Meralgia paraesthetica: a nerve entrapment syndrome. *Maryland State Medical Journal* 23:57-58.
- Nitz A.J., Dobner J.J., Kersey D. (1985), Nerve injury and grade II and III ankle sprains. *American Journal of Sports Medicine* 13:177-182.
- Oh S.J., Lee K.W. (1987) Medial plantar neuropathy. *Neurology* 37:1408-1410.
- Phalen G.S. (1966), The carpal tunnel syndrome:seventeen years experience in diagnosis and treatment of 654 hands. *Journal of Bone and Joint Surgery* 48A:211-228.
- Phillips H., Grieve G.P. (1986), The thoracic outlet syndrome. In: Grieve G.P. (ed), *Modern manual therapy of the vertebral column*. Churchill Livingstone, Edinburgh.
- Pratt N.E. (1986), Neurovascular entrapments in the regions of the shoulder and posterior triangleof the neck. *Physical Therapy* 66:1894-1900.
- Pringle R.M., Protheroe K., Mukherjee S.K. (1974), Entrapment neuropathy of sural nerve. *Journal of Bone and Joint Surgery* 56B:465-468.
- Quintner J.L., Elvey R.L., Thomas A.N. (1987), Regional pain syndrome. *Medical Journal of Australia* 146:230-231.
- Quintner J.L. (1989), A study of upper limb pain and paraesthesiae following necj injury in motor vehicle accidents: assessment of the brachial plexus test of Elvey. *British Journal of Rheumatology* 28:528.
- Rask M.R.(1978), superficial radial neuritis and de Quervain's disease. *Clinical*

- Orthopaedics and Related Research* 131:176-178.
- Saplys R., Mackinnon S.E., Dellon A.L. (1987), The relationship between nerve entrapment versus neuroma complications and the misdiagnosis of de Quervain's disease. *Contemporary Orthopaedics* 15:51-57.
  - Sarala P.K., Nishihara T., Oh S.J. (1979), Meralgia paraesthetica: electrophysiological study. *Archives of Physical Medicine and Rehabilitation* 60:30-31.
  - Smith B.E., Litchy W.J. (1989), Sural mononeuropathy: a clinical and electrophysiological study. *Neurology* 39 (Suppl 1):296.
  - Sjøgaard I. (1983), Sciatic nerve entrapment. *Journal of Neurosurgery* 58:275-276.
  - Stewart H.D., Innes A.R., Burke F.D. (1985), The hand complications of Colles' fractures. *Journal of Hand Surgery* 10B: 103-106.
  - Sunerland S. (1978), *Nerves and nerve injuries*. Churchill Livingstone, Edinburgh.
  - Sutton G. (1984), Hamstring by musculi ischiotibiali strains: a review of the literature. *Journal of Orthopaedic and Sports Physical Therapy* 5:184-195.
  - Szabo R.M. (1989), Superficial radial nerve compression syndrome. In: Szabo R.M. (ed), *Nerve compression syndrome*. Slack, Thorofare.
  - Toby E.B., Koman L.A. (1989), Thoracic outlet compression syndrome. In: Szabo R.M. (ed), *Nerve compression syndromes*. Slack, Thorofare.
  - Werner C.O., Elmquist D., Ohlin T. (1983), Pressure and nerve lesions in the carpal tunnel. *Acta Orthopaedica Scandinava* 5:312-316.
  - Wilson P.R. (1990), Sympathetically maintained pain: diagnosis, measurement and efficacy of treatment. In: Stanton-Hicks M. (ed), *Pain and the sympathetic nervous system*. Kluwer, Norwell.
  - Young L. (1989), The upper limb tension test response in a group of post Colles' fracture patients. Unpublished thesis, South Australian Institute of Technology, Adelaide.

### **Disturbi da neurotensione anomala nel canale spinale**

- Benoist M., Ficat C., Baraf P. et al. (1980), Postoperative lumbar epiduro-arachnoiditis: diagnosis and therapeutic aspects. *Spine* 5:432-436.
- Blikra G. (1969), Intradural herniated lumbar disc. *Journal of Neurosurgery* 31:676-679.
- Bogduk N. (1986), Cervical causes of headache and dizziness. In: Grieve G.P. (ed), *Modern manual therapy of the vertebral column*. Churchill Livingstone, Edinburgh.
- Bogduk N. (1986), The anatomy and pathophysiology of whiplash. *Clinical Biomechanics* 1:92-101.
- Bogduk N. (1989), Anatomy of headache. In: Dalton M. (ed), *Proceedings of headache and face pain symposium*. Manipulative Physiotherapists Association of Australia, Brisbane.
- Breig A. (1978), *Adverse mechanical tension in the central nervous system*. Almqvist & Wiksell, Stockholm.
- Chino N. (1981), Electrophysiological investigation on shoulder subluxation in hemiplegics. *Scandinavian Journal of Rehabilitation Medicine* 13:17-21.
- Clark K. (1969), Significance of the small lumbar spinal canal: cauda equina compression syndromes due to spondylosis: clinical and surgical significance. *Journal of Neurosurgery* 31:495-498.
- Clemens H.J., Burrow K. (1972), Experiential investigation on injury mechanisms at frontal and rear-front vehicle impacts. In: *Proceedings of the Sixteenth Stapp Car Crash conference* 76-104.
- De la Port C., Siegfried J. (1983), Lumbosacral spinal fibrosis (spinal arachnoiditis). *Spine* 8:593-603.
- Dommissie G.F. (1974), The blood supply of the spinal cord: a critical vascular zone in spinal surgery. *Journal of Bone and Joint Surgery* 56B:225-235.

- El Mahdi M.A., Latif F.Y.A., Janko M. (1981), The spinal nerve root innervation , and a new concept of the clinicopathological interrelations in back pain and sciatica. *Neurochirurgia* 24:137-141.
- Elvey R.L. (1986), Treatment of arm pain associated with abnormal brachial plexus tension. *Australian Journal of Physiotherapy* 32:225-230.
- Fahni W.H. (1966), Observations on straight leg raising with special reference to nerve root adhesions. *Canadian Journal of Surgery* 9:44-48.
- Fernandez E., Pallinni R. (1985), Connective tissue scarring in experimental spinal cord lesions: significance of dural continuity and the role of epidural tissues. *Acta Neurochirurgica* 76:145-148.
- Ford D.J., Ali M.S. (1985), Acute carpal tunnel syndrome. *Journal of Bone and Joint Surgery* 65B:758-759.
- Genis D, Busquets C., Manubens E. et al.m (1989), Epidural morphine analgesia in Guillain Barré syndrome. *Journal of Neurology, Neurosurgery and Psychiatry* 52:999-1001.
- Hoyland J.A., Freemont A.J., Denton J. et al. (1988), Retained surgical swab debris in postlaminectomy arachnoiditis and peridural fibrosis. *Journal of Bone and Joint Surgery* 70B:659-662.
- Kaplan P.E., Meredith J., Taft G. et al. (1977), Stroke and brachial plexus injury: a difficult problem. *Archives of Physical Medicine and Rehabilitation* 58:415-418.
- Lee S., Fairholm D. (1983), Intradural rupture of lumbar intervertebral disc. *Canadian Journal of Neurological Sciences* 10:192-194.
- Louis R. (1981), Vertebro-radicular and vertebro-medullary dynamics. *Anatomica Clinica* 3:1-11.
- MacNab I. (1971), The Whiplash syndrome. *Orthopaedic clinics of North America* 2:389-403.
- Maimaris C., Barnes M.R., Allen M.J. (1988), Whiplash injuries of the neck: a retrospective study. *Injury* 19:393-396.
- Maitland G.D. (1986), *Vertebral manipulation*, 5th ed. Butterworths, London.
- Marinacci A.A., Courville C.B. (1962), Radicular syndrome simulating intra-abdominal surgical conditions. *American Surgery* 28:59-63.
- McGuckin N. (1986), The T4 syndrome. In Grieve G.P. (ed), *Modern manual therapy of the vertebral column*. Churchill Livingstone, Edinburgh.
- McKenzie R.A. (1981), *The lumbar spine: mechanical diagnosis and therapy*. Spinal Publications, Waikanae.
- Mikawa Y., Hamagami H., Shikata J. et al. (1986), An experimental study on prevention of postlaminectomy scar formation by the use of new materials. *Spine* 11:843-846.
- Murphy R.W. (1977), Nerve roots and spinal nerves in degenerative disc disease. *Clinical Orthopaedic and Related Research* 129:46-60.
- Ommaya A.K., Faas F., Yarnell P. (1968), Whiplash injury and brain damage. *Journal of the American Medical Association* 204:285-289.
- Ostheimer G.W., Palahniuk R.J., Shnider S.M. (1974), Epidural blood patch for post-lumbarpuncture headache. *Anesthesiology* 41:307-308.
- Pan G., Kulkarni M., MacDougall D.J. et al. (1988), Traumatic epidural haematoma of the cervical spine: diagnosis with magnetic resonance imaging. *Journal of Neurosurgery* 68:798-801.
- Phillips H., Grieve G.P. (1986), The thoracic outlet syndrome. In: Grieve G.P. (ed), *Modern manual therapy of the vertebral column*. Churchill Livingstone, Edinburgh.
- Poutain G.D., Keegan A.L., Jayson M.I.V. (1987), Impaired fibronolytic activity in defined chronic back pain syndrome. *Spine* 12:83-85.
- Quiles M., Marchisello P.J., Tsairis P. (1978), Lumbar adhesive arachnoiditis. *Spine* 3:45-50.
- Quintner J.L. (1989), A study of upper limb pain and paraesthesiae following neck injury in

- motor vehicle accidents: assessment of the brachial plexus tension test of Elvey. *British Journal of Rheumatology* 28:528-533.
- Ransford A.O., Harris B.J. (1972), Localised arachnoiditis complicating lumbar disc lesions. *Journal of Bone and Joint Surgery* 54B:656-665.
  - Richards H.J. (1954), Causes of coccydynia. *Journal of Bone and Joint Surgery* 36B:142-148.
  - Scott B.B., Quisling R.G., Miller C. et al. (1976), Spinal epidural haematoma. *Journal of the American Medical Association* 235:513-515.
  - Simionato R., Stiller K., Butler D. (1988), Neural tension signs in Guillain Barré syndrome: two case reports. *Australian Journal of Physiotherapy* 34:257-259.
  - Smyth M.J., Wright V. (1958), Sciatica and the intervertebral disc. *Journal of Joint Surgery* 40A:1401-1418.
  - Stoddard A. (1969) *Manual of osteopathic practice*. Hutchinson, London.
  - Stone L., Keenan M.E. (1988), Peripheral nerve injuries in the adult with traumatic brain injury. *Clinical Orthopaedics and Related Research* 233:136-144.
  - Thomas P.K. (1982), Pain in peripheral neuropathy: clinical and morphological aspects. In: Culp W.J., Ochoa J. (eds), *Abnormal nerves and muscles as impulse generators*. Oxford, New York.
  - Thorsen G. (1947), Neurological complications after spinal anaesthesia and results from 2493 followup cases. *Acta Chirurgiae Scandinavica* 95 (Suppl 121):7-272.
  - Triano J.J., Luttges M.W. (1982), Nerve irritation: a possible model of sciatic neuritis. *Spine* 7:129-136.
  - Van Langenberghe H.V.K., Partridge C.J., Edwards M.S. et al. (1988), Shoulder pain in hemiplegia: a literature review. *Physiotherapy Practice* 4:155-162.
  - Vandam L.D., Dripps R.D. (1956), Long-term followup of patients who received 10,098 spinal anaesthetics: syndrome of decreased intracranial pressure (headache and ocular and auditory difficulties). *Journal of the American Medical Association* 161:586-591.
  - Wittebol M.C., Van Veelen C.W.M. (1984), Spontaneous spinal epidural haematoma. *Clinics in Neurology and Neurosurgery* 86:265-270.
  - Wolff H.G. (1963) *Headache and other head pain*, 2nd ed. Oxford, New York.

### **Meccanismi del dolore e sensibilizzazione periferica**

- Ali z, Ringkamp M, Hartke TV, et al. (1999), Uninjured C-fiber nociceptors develop spontaneous activity and alpha adrenergic sensitivity following L6 spinal nerve ligation in the monkey. *Journal of Neurophysiology* 81:455-466.
- Amir M, Michaelis M Et Devor M (1999), Membrane potential oscillations in dorsal root ganglion neurons: role in normal electrogenesis and neuropathic pain. *Journal of Neurosciences* 19:8589-8596.
- Amir R Et Devor M (1993) Ongoing activity in neuroma afferents bearing retrograde sprout. *Brain Research* 630:283-288.
- Asbury Ak Et Fields HL (1984) Pain due to peripheral nerve damage: an hypothesis. *Neurology* 34:1587-1590.
- Baker M Et Bostok H (1992) ectopic activity in demyelinated spinal root axons of the rat. *Journal of Physiology* 451:539-552.
- Basbaum Al Et Wall PD (1976) Chronic changes in the response of cells in adult cat dorsal

horn following partial deafferentation: the appearance of responding cells in a previously non-responsive region. *Brain Research* 116:181-204.

- Bennet GJ (1999), Does a neuroimmune interaction contribute to the genesis of painful peripheral neuropathies. *Proceedings of the National Academy of Sciences* 96:7737-7738.
- Bevan S Et Yeats J (1991), Protons activate a cation conductance in a sub-population of rat dorsal root ganglion neurones. *Journal of Physiology* 433:145-161.
- Birder LA Et Perl ER (1999), Expression of alpha2-adrenergic receptors in rat primary afferent neurones after peripheral nerve injury or inflammation. *Journal of Physiology (London)* 515:533-542.
- Boden SD, Davis D, Dina TS, et al. (1990) Abnormal magnetic-resonance scans of the lumbar spine in asymptomatic subjects: A prospective investigation. *Journal of Bone and Joint Surgery* 72A:403-408.
- Bossut DF, Shea VK Et Perl ER (1996), Sympathectomy induces adrenergic excitability of cutaneous C-fiber nociceptors. *Journal of Neurophysiology* 75:514-517.
- Bove GM Et Light AR (1995) Calcitonin gene-related peptide and peripherin immunoreactivity in nerve sheaths. *Somatosensory and Motor Research* 12:49-57.
- Bove GM Et Light AR (1997) The nervi nervorum. *Pain Forum* 6:181-190.
- Butler DS (1991) *Mobilisation of the Nervous System*, Churchill Livingstone, Melbourne.
- Butler DS (1994), The upper limb tension test revisited. In: Grant R (ed.) *Physical Therapy of the Cervical and Thoracic Spine*, 2nd edn. Churchill Livingstone, New York.
- Butler DS (1998), Integrating pain awareness into physiotherapy- wise action for the future. In: Gifford LS (ed.) *Topical Issues in Pain*, NOI Press, Falmouth.
- Calixto JB, Cabrini DA, Ferreira J. Et al. (2000), Kinins in pain and inflammation. *Pain* 87:1-5.
- Calvin WH, Devor M Et Howe JF (1982) Can neuralgias arise from minor demyelination? Spontaneous firing, mechanosensitivity, and afterdischarge from conduction axons. *Experimental Neurology* 75:755-763.
- Campbell JN, Meyer RA Et Raja SN (1992), Is nociceptor activation by alpha-1 adrenoreceptors the culprit in sympathetically maintained pain? *American Pain Society Journal* 13:344-350.
- Campero M, Serra J, Marchettini P, et al. (1998) Ectopic impulse generation and autoexcitation in single myelinated afferent fibres in patients with peripheral neuropathy and positive sensory symptoms. *Muscle Nerve* 21:1661-1667.
- Carlton SM Et Coggeshall RE (1999) Inflammation-induced changes in peripheral glutamate receptor populations. *Brain Research* 820:63-70.
- Cervero F Et Laird JMA (1996) From acute to chronic pain: mechanisms and hypotheses. In:

Carli G Et Zimmermann M (eds.) *Towards the neurobiology of Chronic Pain*, Elsevier, Amsterdam.

- Chanl L Et Ladd R (1976) Local oedema and general excitation of cutaneous sensory receptors produced by electrical stimulation of the saphenous nerve in the rat. *Pain* 2:25-34.
- Chen C, Cavanaugh JM, Ozaktay AC, et al. (1977) Effects of phospholipase A2 on lumbar nerve root structure and function. *Spine* 22:1057-1064.
- Chen Y Et Devor M (1998) Ectopic mechanosensitivity in injured sensory axons arises from the site of spontaneous electrogenesis, *European Journal of Pain* 2:165-178.
- Cherkin DC (1998) Primary care research on low back pain. *Spine* 23:1997-2002.
- Chung K, Kim HJ, Na HS, et al. (1993) Abnormalities of sympathetic innervation in the area of an injured peripheral nerve in a rat model of neuropathic pain. *Neurosciences Letters* 162:85-88.
- Craig AD (1999) Functional anatomy of supraspinal pain processing with reference to the central pain syndrome. In: Max M (ed) *Pain 1999 – An Updated Review*, IASP Press, Seattle.
- Daemen MA, Kurvers HA, Kitslaar PJ, et al. (1988) Neurogenic inflammation in an animal model of neuropathic pain. *Neurological Research* 20:41-45.
- Davis KD, Treede RD, Raja SN, et al. (1991) Topical application of clonidine relieves hyperalgesia in patients with sympathetically maintained pain. *Pain* 47:309-317.
- Devor M Et Seltzer Z (1999) Pathophysiology of damaged nerves in relation to chronic pain. In: Wall PD Et Melzack R (eds.) *Textbook of Pain*, 4th edn. Churchill Livingstone, Edinburgh.
- Devor M Et Wall PD (1981) Plasticity in the spinal cord sensory map following peripheral nerve injury in rats. *Journal of Neuroscience* 1:679-684.
- Deyo RA (1993) Practice variations, treatment fads, rising disability: do we need a new clinical research paradigm? *Spine* 18:2153-2162.
- Dickenson AH (1996) Pharmacology of pain transmission and control. In: Campbell JN (ed.) *Pain 1996 – An Updated Review*, IASP Press, Seattle.
- Dray A (1995) Inflammatory mediators of pain. *British Journal of Anaesthesia* 75:125-131.
- Drummond PD, Finch PM Et Gibbins I (1996) Innervation of hyperalgesic skin in patients with complex regional pain syndrome. *The Clinical Journal of Pain* 12:222-231.
- Dyck PJ (1993) Quantitative severity of neuropathy. In: Dyck PJ Et Thomas PK (eds.) *Peripheral Neuropathy*, 2nd edn. W.B. Saunders, Philadelphia.
- Ebertz JM, Hirshman C, Kettelkamp NS, et al. (1987) Substance-P induced histamine release in human cutaneous mast cells. *Journal of Investigative Dermatology* 88:682-685.
- Eliav E, Herzberg U, Ruda MA, et al. (1999) Neuropathic pain from an experimental

neuritis of the rat sciatic nerve. *Pain* 83:169-182.

- England JD, Happel LT, Liu ZP, et al. (1998) Abnormal distributions of potassium channels in human neuromas. *Neuroscience Letters* 255:37-40.
- Fitzgerald M Et Lynn B (1997) The sensitization of high threshold mechanoreceptors with myelinated axons nby repeated heating. *Journal of Physiology (London)* 365:549-563.
- Franson RC, Saal JS Et J.A. S (1992) Human disc phospholipase A2 is inflammatory. *Spine* 17 (Suppl): S129-S132.
- Gallego R, Ivorra I Et Morales A (1987) Effects of central or peripheral axotomy on membrane properties of sensory neurones in the petrosal ganglia of the cat. *Journal of Physiology (London)* 391:39-56.
- Gifford L Et Butler D (1997) The integration of pain sciences into clinical practice. *The Journal of Hand Therapy* 10:86-95.
- Gifford LS (1997) Pain. In: Pitt-Brooke J, Reid H, Lockwood J et al. (eds.) *Rehabilitation of Movement*, WB Saunders, London.
- Gifford LS (1998) Tissue and input related mechanisms. In: Gifford LS (ed.) *Topical Issues in Pain*, NOI Press, Falmouth.
- Grubb BD, Stiller RU Et Schaible HG (1993) Dynami changes in the receptive field properties of spinal cord neurons with ankle input in rats with chronic unilateral inflammation in the ankle region. *Experimental Brain Research* 92:441-452.
- Gurtu S Et Smith PA (1988) Electrophysiological characteristic of hamster dorsal root ganglion cells and their response to axotomy. *Journal of Neurophysiology* 59:408-423.
- Habler H.J, Janig W Et Koltzenburg M (1987) Activationof unmyelinated afferents in chronically lesioned nerves by adrenaline and excitation of sympathetic efferents in the cat. *Neuroscience Letters* 82:35-40.
- Hagermark O, Hokfelt T Et Pernow B (1978) Flare and itch induced by substance P in human skin. *Journal of Investigative Dermatology* 71:233-235.
- Haldeman S (1990) Presidential address, North American Spine Society: Failure of the pathology model to predict back pain. *Spine* 15:718-724.
- Handwerker HO Et Reeh PW (1991) Pain and inflammation. In: Bond MR, Charlton IE Et Woolf CJ (eds.) *Pain Research and Clinical Management*, Elsevier, Amsterdam.
- Howe JF, Loeser JD Et Calvin WH (1977) Mechanosensitivity of dorsal root ganglia and chronically injured axons: a physiological basis for radicular pain of nerve root compression. *Pain* 3:25-41.
- Hromada J (1963) On the nerve supply of the connective tissue of some peripheral nervous system components. *Acta Anatomica* 55:343-351.
- Hulsebosch CE Et Coggeshall RE (1981) Quantitation of sprouting of dorsal root axons.



Science 213:1020-1021.

- Hylden JL, Nahin RL, Traub RJ, et al. (1989) Expansion of receptive fields of spinal lamina 1 projection neurones in rats with unilateral adjuvant-induced inflammation. The contribution of dorsal horn mechanisms. *Pain* 37:229-243.
- Janig W (1996) The puzzle of “reflexsympathetic dystrophy”: Mechanisms, hypotheses, open questions. In: Janig W Et Stanton-Hicks M (eds.) *Reflex Sympathetic Dystrophy: A Reappraisal*, IASP Press, Seattle.
- Janig W, Levine JD Et Michaelis M (1996) Interaction of sympathetic and primary afferent neurons following nerve injury and tissue trauma. In: Kumazawa T, Kruger L Et Mizumura K (eds.) *Progress in Brain Research*, 113. *The Polymodal Receptor, A Gateway to Pathological Pain*, Elsevier, Amstredam.
- Jensen MC, Brant-Zawadzki MN, Obuchowski N, et al. (1994) Magnetic resonance imaging of the lumbar spine in people without back pain. *The New England Journal of Medicine* 331:69-73.
- Junger H Et Sorkin LS (2000) Nociceptive and inflammatory effects of subcutaneous TNFalpha. *Pain* 85:145-151.
- Kang JD, Georgescu HI, McIntre-Larkin L, et al. (1995) Herniated cervical intervertebral discs spontaneously produce matrix metalloproteinases, nitric oxide, interleukin-6, and prostaglandin E2. *Spine* 20:2373-2378.
- Kang JD, Georgescu HI, McIntyre-Larkin LM, et al. (1996) Herniated lumbar intervertebral discs spontaneously produce matrix metalloproteinases, nitric oxide, interleukin-6 and prostaglandin E2. *Spine* 21:271-7.
- Kolston J Et Lisney SJW (1993) A study of vasodilator responses evoked by antidromic stimulation of A delta afferent fibers supplying normal and reinnervated rat skin. *Microvascular Research* 46:143-147.
- Koltzenburg M (1999) The changing sensitivity in the life of the nociceptor. *Pain Supplement* 6:S93-S102.
- Kruger L (1996) The functional morphology of thin sensory axons: some principles and problems. In: Kumazawa T, Kruger L Et Mizumura K. (eds) *The polymodal Receptor: A Gateway to Pathological Pain*. Elsevier, Amsterdam.
- Kuslich SD, Ulstrom CL Et Michael CJ (1991) The tissue origin of low back pain and sciatica. *Orthopaedic Clinics of North America* 22:181-187.
- Leadbetter WB, Buckwalter JA Et Gordon SL eds. (1990) *Sports-induced Inflammation*, American Academy of Orthopaedic Surgeons, Park Ridge, Illinois.
- Levine JD Et Reichling DB (1999) Peripheral mechanisms of inflammatory pain. In: Wall PD Et Melzack R (eds.) *Textbook of Pain*, 4th edn. Churchill Livingstone, Edinburgh.
- Lewis T (1942) *Pain*, Macmillan, New York.

- Liu X, Eschenfelder S, Blenk KH, et al. (2000) Spontaneous activity of axotomised afferent neurons after L5 spinal nerve injury in rats. *Pain* 84:309-318.
- Loeser JD (1985) Pain due to nerve injury. *Spine* 10:232-235.
- Loh L Et Nathan PW (1978) Painful peripheral states and sympathetic blocks. *Journal of Neurology, Neurosurgery and Psychiatry* 41:664-671.
- Lundborg G (1988) *Nerve Injury and Repair*, Churchill Livingstone, Edinburgh.
- Mackinnon SE Et Dellon AI (1988) *Surgery of the Peripheral Nerve*, Thieme, New York.
- Maggi Ca Et Meli A (1988) The sensory-efferent function of capsaicin-sensitive neurones. *General Pharmacology* 19:1-43.
- Magni G, Marchetti M, Moreschi C, et al. (1993) Chronic musculoskeletal pain and depressive symptoms in the national health and nutrition examination. 1. Epidemiologic follow up-study. *Pain* 53:163.
- Matzner O Et Devor M (1987) Contrasting thermal sensitivity of spontaneously active A and C fibres in experimental nerve-end neuromas. *Pain* 30:373-384.
- McLachlan EM, Janig W, Devor M, et al. (1993) Peripheralnerve injury triggers noradrenergic sprouting within dorsal root ganglia. *Nature* 363:534-536.
- Mendell LM Et Wall PD (1965) Responsesof single dorsal horn cells ti peripheral cutaneous unmyelinated fibres. *Nature* 206:97-99.
- Mense S (1996) Group III and IV nociceptors in skeletal muscle: are they specific or polymodal? In: Kumazawa T, Kruger L Et Mizumura K (eds.) *Progress in Brain Research*, Vol. 113Elsevier, Amsterdam.
- Mogil JS, Yu L Et Basbaum AI (2000) Pain genes?: natural variationand transgenic mutants. *Annual Review of Neurosciences* 23:777-811.
- Moskowitz MA (1984) The neurobiology of vascular head pain. *Annals of Neurology* 16:157-168.
- Moskowitz MA (1993) The trigeminovascular system. In: Olesen J, Tfelt-Hansen P Et Welch KMA (eds.)*The Headaches*, Raven Press, Ltd., New York.
- Neary D Et Ochoa RW (1975) Sub- clinical entrapment neuropathy in man. *Journal of the Neurological Sciences* 24:283-298.
- Neugebauer V Et Schaible HG (1990) Evidence for a central component in the sensitization of spinal neurones with joint input during development of acute arthritis in a cat's knee. *Joournal of Neurophysiology* 64:299-311.
- Nilsson J, von Eular AM Et Dalsgaard C-J (1985) Stimulation of connective tissue cell growth by substance P and substance K. *Nature* 315:61-63.
- Nordin M, Nystrom B, Wallin U, et al. (1984) Ectopic sensory discharges and paresthesiae

in patients with disorders of peripheral nerves, dorsal roots and dorsal columns. *Pain* 20:231-245.

- Nystrom B Et Hagbarth KE (1981) Microelectrode recordings from transected nerves in amputees with phantom limb pain. *Neurosciences Letters* 27:211-216.
- Ochoa J (1993) Guest editorial: Essences, investigation and management of neuropathic pains: hope from acknowledgement of chaos. *Muscle Et Nerve* 16:997-1008.
- Ochoa J Et Mair WGP (1969) The normal sural nerve in man. *Acta Neuropathologica* 13:197-216.
- Ochoa J Et Torebjork E (1983) Sensations by intraneural microstimulation of single mechanoreceptor units innervating the human hand. *Journal of Physiology* 342:633-654.
- Ochoa JL, Cline M, Dotson R, et al. (1987) Pain and paresthesias provoked mechanically in human cervical root entrapment (sign of Spurling). Single sensory unit antidromic recording of ectopic, bursting, propagated nerve activity. In: Pubols LM Et Sessle BJ (eds.) *Effects of Injury on Trigeminal and Spinal Somatosensory System*, Liss, New York.
- Perl ER (1999) Causalgia, pathological pain, and adrenergic receptors. *Proceeding of the National Academy of Science USA* 96:9664-7667.
- Peterson CK, Bolton JE Et Wood AR (2000) A cross-sectional study correlating lumbar spine degeneration with disability and pain. *Spine* 25:218-223.
- Raja SN, Abatzis V, Hocasek SJ, et al. (1998) Role of alpha adrenoceptors in neuroma pain in amputees. *American Society of Anesthesiology*.
- Raja SN, Meyer RA, Ringkam M, et al. (1999) Peripheral neural mechanism of nociception. In: Wall PD Et Melzack R (eds.) *Textbook of Pain*, 4th edn. Churchill Livingstone, Edinburgh.
- Ramer MS, Thompson SWN Et McMahon SB (1999) Causes and consequences of sympathetic basket formation in dorsal root ganglia. *Pain Suppl* 6:S111-S120.
- Raminski M (1978) Ectopic generation of impulses and cross-talk in spinal nerve roots of "dystrophic" mice. *Annals of Neurology* 3:351-357.
- Rappaport ZH Et Devor M (1994) Trigeminal neuralgia: the role of self sustaining discharge in the trigeminal ganglion. *Pain* 56:127-138.
- Redford EJ, Hall SM Et Smith KJ (1995) Vascular changes and demyelination induced by the intraneural injection of tumour necrosis factor. *Brain* 118:869-878.
- Reeh PW Et Kress M (1995) Effect of classic algogens. *Seminars in Neuroscience* 7:221-226.
- Rempel D, Dahlin L Et Lundborg G (1999) Pathophysiology of nerve compression syndromes: response of peripheral nerves to loading. *Journal of Bone and Joint Surgery* 81A:1600-1610.

- Ro LS Et Jacobs JM (1993) The role of the saphenous nerve in experimental sciatic nerve mononeuropathy produced by loose ligatures: a behavioural study. *Pain*: 52:359-369.
- Saal JS, Franson RC, Dobrow R, et al. (1990) High levels of inflammatory phospholipase A2 activity in lumbar disc herniation. *Spine* 15:674-678.
- Sann H Et Pierau FK (1998) Efferent functions of C-fiber nociceptors. *Zeitschrift fur Rheumatologie* 57 (Suppl 2);8-13.
- Sato J Et Perl ER (1991) Adrenergic excitation of cutaneous pain receptors induced by peripheral nerve injury. *Science* 251:1608-1610.
- Sauer SK, Bove GM, Averbek B, et al. (1999) Rat peripheral nerve components release calcitonin gene-related peptide and prostaglandin E2 in response to noxious stimuli: evidence that the nervi nervorum are nociceptors. *Neuroscience* 92:319-325.
- Schaible HG, Neugebauer V, Cervero FA, et al. (1991) Changes in tonic descending inhibition of spinal neurones with articular input during the development of acute arthritis in the cat. *Journal of Neurophysiology* 66:1021-1032.
- Schaible HG Et Schmidt RF (1988) Time course of mechanosensitivity changes in articular afferents during a development experimental arthritis. *Journal of Neurophysiology* 60:2180-2185.
- Schmidt RF (1996) The articular polymodal nociceptor in health and disease. In: Kumazama T, Kruger L Et Mizumura K (eds.) *Progress in Brain Research*, Vol 113, Elsevier, Amsterdam.
- Schmidt RF, Schaible KM, Heppelmann B, et al. (1994) Silent and active nociceptors: structure, functions and clinical implications. 7Th World Congress on Pain, IASP Press.)
- Serra J (1999) Overview of neuropathic pain syndromes. *Acta Neurologica Scandinavica* (Suppl) 173:7-11.
- Sheen K Et Chung JM (1993) Signs of neuropathic pain depend on signals from injured fibers in a rat model. *Brain Research* 61:62-68.
- Shinder V Et Devor M (1994) Structural basis of neuron-to-neuron cross excitation in dorsal root ganglia. *Journal of Neurocytology* 23:515-531.
- Shu X-Q Et Mendell LM (1999) Neurotrophins and hyperalgesia. *Proceedings of the National Academy of Science USA* 96:7693-7696.
- Sluka KA, Willis WD Et Westlund KN (1995) The role of dorsal root reflexes in neurogenic inflammation . *Pain Forum* 4:141-149.
- Small JR, Scadding JW Et Landon DN (1996) Ultrastructural localization of sympathetic axons in experimental rat sciatic nerve neuromas. *Journal of Neurocytology* 25:573-582.
- Smith KJ Et McDonald WI (1980) Spontaneous and mechanically evoked activity due to central demyelinating lesion. *Nature* 286:154-155.

- Smyth M Et Wright V (1958) Sciatica and the intervertebral disc. *Journal of Bone and Joint Surgery* 40A: 1401-1418.
- Sorkin LS, Xiao W-H, Wagner R, et al. (1997) Tumor necrosisfactor alpha induces ectopic activity in nociceptive primary afferent fibres. *Neuroscience* 81:255-262.
- Sotgiu ML Et Biella G (1997) Role of input from saphenous afferents in altered spinal processing of noxious signal that follows sciatic nerve constriction in rats. *Neuroscience Letters* 223:101-104.
- Steen KH, Issberner U Et Reeh PH (1995) Pain due to experimental acidosis in human skin:evidence for non-adapting nociceptor excitation. *Neuroscience Letters* 199:29-32.
- Steen KH Et Reeh PW (1993) Sustained graded pain and hyperalgesia from hermlless experimental tissue acidosis in human skin. *Neuroscience Letters* 154:113-116.
- Steen KH, Steen AE, Kreysel HW, et al. (1996) Inflammatory mediators potentiate pain induced by experimental tissue acidosis. *Pain* 66:163-170.
- Sugawara O, Atsuta Y, Iwahara T, et al. (1996) The effects of mechanical compression and hypoxia on nerve roots and dorsal root ganglia. *Spine* 21:2089-2094.
- Sunderland S (1978) *Nerves and Nerve Injuries*, 3rd edn. Churchill Livingstone, Melbourne.
- Svendsen F, Tjolsen A Et Hole K (1988) AMPA and NMDA receptor-dependent spinal LTP after nociceptive tetanic stimulation. *Neuroreport* 9:1185-1190.
- Tal M Et Bennett GJ (1994) Extra-territorial pain in rats with a peripheral neuropathy: mechano-hyperalgesiaand mechano-allodynia in the territory of an uninjured nerve. *Pain*:57:375-382.
- Tal M Et Eliav E (1996) Abnormal discharge originates as the site of nerve injury in experimantal constriction neuropathy in the rat. *Pain* 64:511-518.
- Vallbo AB, Hagbarth KE, Torebjork HE, et al. (1979) Somatosensory, proprioceptive, and sympathetic activity in human peripheral nerves. *Physiological Review* 59:919-957.
- Van Wingerden BAM (1995) *Connective Tissue in Rehabilitation*, Verlag-Vaduz Liechtenstein, Scipro.
- Verhaak PF, Kerssens JJ, Dekker J, et al. (1998) Prevalence of chronic benign pain disorder among adults: a review of the literature. *Pain* 77:231-239.
- Waddell G (1998) *The Back Pain Revolution*, Churchill Livingstone, Edinburgh.
- Waldmann R, Champigny G, Bassilana F, et al. (1997) A proton-gated cation channel involved in acid sensing. *Nature* 386:173-177.
- Wall PD (1996) The mechanism by which tissue damage and pain are related. In: Campbell JN (ed.) *Pain 1996- An Updated Review*, IASP Press, Seattle.
- Wall PD (1999) *Pain, the Science of Suffering*, Weidenfield Et Nicholson, London.

- Wall PD Et Devor M (1983) Sensory afferent impulses originate from dorsal root ganglia and chronically injured axons: a physiological base for the radicular pain of nerve root compression. *Pain* 17:321-339.
- Wall PD Et Gutnick M (1974) Ongoing activity in peripheral nerve: the physiology and pharmacology of impulses originating from a neuroma. *Experimental Neurology* 43:580-593.
- Wall PD Et Melzack R eds. (1999) *Textbook of Pain*, 4th ed. Churchill Livingstone, Edinburgh.
- Watkins LR Et Maier SF (2000) The pain of being sick: implications of immune-to-brain communication for understanding pain. *Annual Review of Psychology* 51:29-57.
- Watkins LR, Maier SF Et Goehler LE (1995) Immune activation: the role of pro-inflammatory cytokines in inflammation, illness responses and pathological pain states. *Pain* 63:289-302.
- Westlund KN (1999) Introduction to the basic science of pain and headache for the clinician: anatomical concepts. In: Max M (ed.) *Pain 1999—An updated review*, IASP Press, Seattle.
- Woo SLY Et Buckwalter JA eds. (1988) *Injury and Repair of the Musculoskeletal Soft Tissues*, American Academy of Orthopedic Surgeons, Park Ridge, Illinois.
- Woolf CJ, Bennett GJ, Doherty M, et al. (1998) Towards a mechanism-based classification of pain. *Pain* 77:227-229.
- Zochodne DW, Theriault M, Sharkey KA, et al. (1997) Peptides and neuromas: calcitonin gene related peptide, substance P, and mast cells in a mechanosensitive human sural neuroma. *Muscle Et Nerve* 20:875-880.

## **Neurodinamica**

- Andary MT, Crewe N, Ganzel SK, et al. (1997) Traumatic brain injury/chronic pain syndrome: A case comparison study. *The Clinical Journal of Pain* 13:245-250.
- Apfelberg DB Et Larson SJ (1973) Dynamic anatomy of the ulnar nerve at the elbow. *Plastic and Reconstructive Surgery* 51:76-81.
- Babin E Et Capesius P (1976) Etude radiologique des dimensions du canal rachidien cervical et de leurs variations au cours des epreuves fonctionnelles. *Annals of Radiology* 19:457-462.
- Baker P, Ladds M Et Rubinson K (1977) Measurement of the flow properties of isolated axoplasm in a defined chemical environment. *Journal of Physiology* 269:10-11.
- Bashline SD, Bilott JR Et Ellis JP (1996) Meningovertebral ligaments and their putative significance in low back pain. *Journal of Manipulative and Physiological Therapeutics* 19:592-596.
- Beel JA, Groswald DE Et Luttges MW (1984) Alterations in the mechanical properties of

peripheral nerve following crush injury. *Journal of Biomechanics* 17:185-193.

- Beith ID, Robins EJ Et Richerds PR (1995) An assessment of the adaptive mechanisms within and surrounding the peripheral nervous system, during changes in nerve bed length resulting from underlying joint movement. In: Shacklock MO (ed.) *Moving in on Pain*, Butterworth-Heinemann, Australia.
- Benson ER Et Schutzer SF (1999) Posttraumatic piriformis syndrome. *The Journal of Bone and Joint Surgery* 81A: 941-949.
- Blikra G (1969) Intradural herniated lumbar disc. *Journal of Neurosurgery* 31:676-679.
- Blomberg R (1986) The dorsomedian connective tissue band in the lumbar epidural space of humans: An anatomical study using epiduroscopy in autopsy cases. *Anaesthesia and Analgesia* 65:747-752.
- Bogduk N (1983) The innervation of the lumbar spine. *Spine* 8:286-292.
- Borges LF, Hallet M, Selkoe DJ, et al. (1981) The anterior tarsal tunnel syndrome. *Journal of Neurosurgery* 54:89-92.
- Bove GM Et Light AR (1995) Calcitonin gene-related peptide and peripherin immunoreactivity in nerve sheaths. *Somatosensory and Motor Research* 12:49-57.
- Bove GM Et Light AR (1995) Unmyelinated nociceptors of rat paraspinal tissues. *Journal of Neurophysiology* 73:1752-1762.
- Bove GM Et Light AR (1997) The nervi nervorum. *Pain Forum* 6:181-190.
- Breig A (1960) *Biomechanics of the Central Nervous System*, Almqvist and Wiksell, Stockholm.
- Breig A (1978) *Adverse Mechanical Tension in the Central Nervous System*, Almqvist and Wiksell, Stockholm.
- Breig A Et Marion O (1963) Biomechanics of the lumbosacral nerve roots. *Acta Radiologica* 1:1141-1159.
- Breig A, Turnbull I Et Hassler O (1966) Effects of mechanical stresses on the spinal cord in cervical spondylosis: a study on fresh cadaver material. *Journal of Neurosurgery* 25:45-56.
- Bridge CJ (1959) Innervation of spinal meninges and epidural structures. *Anatomical Record* 133:533-561.
- Brown BA (1972) Intraneural neurolysis in traumatic peripheral nerve lesions in continuity. *Surgical Clinics of North America* 52:1167-1175.
- Butler DS (1989) *Adverse Mechanical tension in the nervous system: a model for assessment and treatment*. *Australia Journal of Physiotherapy* 35:227-238.
- Butler DS (1991) *Mobilisation of the Nervous System*, Churchill Livingstone, Melbourne.
- Byrod G, Olmarker K, Konno S, et al. (1995) A rapid transport route between the epidural

space and the intraneural capillaries of the nerve roots. *Spine* 20:138-143.

- Cautico W, Parker JC, Pappert E, et al. (1988) An anatomical and clinical investigation of spinal meningeal nerves. *Acta Neurochirurgica* 90:139-143.
- Cyriax J (1978) Mechanism of symptoms: Dural pain. *The Lancet*: 919-921.
- Cyriax J (1978) *Textbook of Orthopaedic Medicine*, 8th edn. Bailliere Tindall, London.
- Dahlin LB, Archer DR Et McLean WG (1987) Treatment with an aldose reductase inhibitor can reduce the innibitation of fast axonal transport following nerve compression in the streptozotonic-rat. *Diabetologia* 30:141-418.
- Dahlin LB Et McLean WG (1986) Effects of graded experimental compression on slow and fast axonal transport in rabbit vagus nerve. *Journal of Neurological Science* 72:19-30.
- De Lorenzo RA , Olson JE, Boska M, et al. (1996) Optimal positioning for cevical immobilisation. *Annals of Emergency Medicine* 28:301-308.
- Delcomyn F (1998) *Foundations of Neurobiology*, W.H. Freeman, New York.
- Dhital KJ, Lincoln J, Appenzeller O, et al. (1986) Adrenergic innervation of vasa and nervi nervorum of optic, sciatic, vagus and sympathetic nerve trunks in normal and steptozotocin-diabetic rats. *Brain Research* 367:39-44.
- Dommissse G (1975) Morphological aspects of the lumbar spine and lumbosacral regions. *Orthopedic Clinics of North America* 6:163-175.
- Dommissse GF ed. (1994) *The blood supply of the spinal cord and the consequences of failure*. Grieve's Modern Manual Therapy, 2nd edn. Churchill Livingstone, Edinburgh.
- Donnerer J, Schuligoi R Et Stein C (1992) Increased content and transport of substance Pand calcitonin gene-related peptide in sensory nerves innervating inflamed tissues: evidence for a regulatory function of nerve growth factor in vivo. *Neuroscience* 49:693-698.
- DoursounianL, Alfonso JM, Iba-Zizen MT, et al. (1989) Dynamics of the junction between the medulla and the cervical spinal cord: an invivo study in the sagittal plane by magnetic resonance imaging. *Surgical and Radiologic Anatomy* 11:313-312.
- du Boulay g, O;Connel J, Currie JC, et al. (1972) Futher investigations on pulsatile movements in the cerebrospinal fluid pathways. *Acta Radiologica* 13:496-523.
- Duckett S Et Duckett S (1993) The neuropathology of the minor head injuury syndrome. In: Mandel S, Thayer Sataloff R Et Schapiro SR (eds.) *Minor Head Trauma*, Springer Verlag, New York.
- Dyck PJ, Lais AC, Giannini C, et al. (1990) Structural alterations of nerve during cuff compression. *Proceedings of the National Academy of Science* 87:9828-9832.
- Edgar MA Et Ghadially JA (1976) Innervation of the lumbar spine. *Clinical Orthopaedics and Related Research* 115:35-41.



- Edgar MA Et Nundy S (1966) Innervation of the spinal dura mater. *Journal of Neurology, Neurosurgery, and Psychiatry* 29:530-534.
- El Mahdi M, Latif F Et Janko M (1981) The spinal dura mater. *Journal of Neurology, Neurosurgery, and Psychiatry* 29:530-534.
- Elvey RL (1986) Treatment of arm pain associated with abnormal brachial plexus tension. *The Australian Journal of Physiotherapy* 32:225-230.
- Emara M Et Saadah AM (1988) The carpal tunnel syndrome in hypertensive patients treated with beta-blockers. *Postgraduate Medical Journal* 64:191-192.
- Ettlin TM, Kischka U, Reichmann S, et al. (1992) Cerebral symptoms after whiplash injury of the neck: a neuropsychological study of whiplash injury. *Journal of Neurology, Neurosurgery and Psychiatry* 55:943-948.
- Fahrni WH (1966) Observations on straight leg-raising with special reference to nerve root adhesions. *Canadian Journal of Surgery* 9:44-48.
- Feindel W, Penfield W Et McNaughton F (1960) The tentorial nerves and the localization of intracranial pain in man. *Neurology* 10:555-563.
- Fischer M, Kaech S, Knutti D, et al. (1998) Rapid actin based plasticity in dendritic spines. *Neuron* 20:847-854.
- Gelberman RH, Hergenroeder PT, Hargens AR, et al. (1981) The carpal tunnel syndrome: a study of canal pressures. *Journal of Bone and Joint Surgery* 63A:380-383.
- Gelberman RH, Szabo RM, Williamson RV, et al. (1983) Sensibility testing in peripheral nerve compression syndromes. An experimental study in humans. *Journal of Bone and Joint Surgery* 65A:632-638.
- Gelberman RH, Yamaguchi K Et Hollstein SB (1998) Changes in interstitial pressure and cross-sectional area of the cubital tunnel and of the ulnar nerve with flexion of the elbow. *Journal of Bone and Joint Surgery* 80A: 492-501.
- Gertzbein S, Seligman J, Holtby R, et al. (1985) Centrode patterns and segmental instability. *Spine* 10:257-261.
- Gifford LS (1998) Factors influencing movement – neurodynamics. In: Pitt-Brooke J, Reid H, Lockwood J et al. (eds.) *Rehabilitation of Movement*, WB Saunders, London.
- Greening J, Smart S, Leary R, et al. (1999) Reduced movement of the median nerve in carpal tunnel during wrist flexion in patients with non-specific arm pain. *Lancet* 354:217-218.
- Groen GJ, Baljet B Et Drukker J (1988) The innervation of the spinal dure mater: Anatomy and clinical implications. *Acta Neurochirurgica*. 92:39-46.
- Haak RA, Klienhaus FW Et Ochs S (1976) The viscosity of mammalian nerve axoplasm measured by electron spin resonance. *Journal of Physiology* 263:11-137.

- Hack GD, Koritzer RT, Robinson WL, et al. (1995) Anatomic relation between the rectus capitis posterior minor muscle and the dura mater. *Spine* 20:2484-2486.
- Haines DE, Harkey HL Et al-Mefty O (1993) The “subdural” space: a new look at an outdated concept. *Neurosurgery* 32:111-120.
- Haller FR Et Low FN (1971) The fine structure of the peripheral nerve root sheath in the subarachnoid space in the rat and other laboratory animals. *Journal of Anatomy* 131:1-20.
- Hanai F, Matsui N Et Hongo N (1996) Changes in response of wide dynamic range neurons in the spinal dorsal horn after dorsal root ganglion compression. *Spine*:1408-1415.
- Harati Y (1993) Anatomy of the spinal and peripheral autonomic nervous system. In: Low PA (ed.) *Clinical Autonomic Disorders*, Little, Brown and Company, Boston.
- Haupt W Et Stoept E (1978) Uber die Dehnbarkeit und Reibfestigkeit der Dura mater spinalis des Menschen. *Verhandlungen Anatomische Gesellschaft* 72:193-144.
- Hofmann M (1898) Die Befestigung der dura mater in wirbelcanal. *Archives of Anatomy and Physiology*:403-412.
- Hovelaque A (1927) *Anatomie des nerfs craniens et rachidiens et du sisteme grand sympathetique chez l'homme*, Gaston Doin et Cie, Paris.
- Hromada J (1963) On the nerve supply of the connective tissue of some peripheral nervous system components. *Acta Anatomica* 55:343-351.
- Hurst LC, Weissberg D Et Carroll RE (1985) The relationship of the double crush to carpal tunnel syndrome: (an analysis of 1,000 cases of carpal tunnel syndrome). *Journal of Hand Surgery* 10B:202-205.
- Inman VT Et Saunders JBC (1942) The clinico-anatomical aspects of the lumbosacral region. *Journal of Radiology* 38:669-678.
- Inufusa A, An HS Et Lim T (1996) Anatomic changes of the spinal canal and intervertebral foramen association with flexion-extension movements. *Spine* 21:2412-2420.
- Jabaley ME, Wallace WH Et Heckler FR (1980) Internal topography of the major nerves of the forearm and hand. A current view. *Journal of Hand Surgery* 5:1-18.
- Janig W Et Koltzenburg M (1990) Receptive properties of pial afferent. *Pain* 45:300-309.
- Kallakuri S, Cavanaugh JM Et Blagojev DC (1998) An immunohistochemical study of innervation of lumbar spinal dura and longitudinal ligaments. *Spine* 23:403-411.
- Kandel ER, Schwartz JH Et Jessell TM (1995) *Essentials of Neural Science and Behaviour*, Appleton Et Lange, Norwalk.
- Kimmel DL (1961) Innervation of spinal dura mater and dura mater of the posterior cranial fossa. *Neurology*: 800-809.
- Kleinrensink GJ, Stoeckart R, Mulder PGH, et al. (2000) Upper limb tension tests as tools in

the diagnosis of nerve and plexus lesions. *Clinical Biomechanics* 15:9-14.

- Kleinrensik GJ, Stoeckart R, Vleeming A, et al. (1995) Mechanical tension in the median nerve. The effects of joint position. *Clinical Biomechanics* 10:240-244.
- Kumar R, Berger RJ, Dunsker SB, et al. (1996) Innervation of the spinal dura: myth or reality. *Spine* 21:18-26.
- Kuslich SD, Ulstrom CI Et Michael CJ (1991) The tissue origin of low back pain and sciatica. *Orthopaedic Clinics of North America* 22:181-187.
- Lerman VI Et Drasin HV (1975) Adhesive lesions of the nerve root in the dural orifice as a cause of sciatica. *Surgical Neurology* 4:229-232.
- Lincoln J, Milner P, Appenzeller O, et al. (1993) Innervation of normal human sural and optic nerves by noradrenaline and peptide-containing nerves: effect of diabetes and alcoholism. *Brain Research* 632:48-56.
- Louis R (1981) Vertebrodiscal and vertebromedullary dynamics. *Anatomia Clinica* 3:1-11.
- Lundborg G (1988) *Nerve Injury and Repair*, Churchill Livingstone, Edinburgh.
- Lundborg G, Myers R Et Powell H (1983) Nerve compression injury and increased endoneurial fluid pressure: a "miniature compartment syndrome". *Journal of Neurology, Neurosurgery and Psychiatry* 46:1119-1124.
- Lundborg G Et Rydevik B (1973) Effects of stretching the tibial nerve of the rabbit. A preliminary study of the intraneural circulation and barrier function of the perineurium. *Journal of Bone and Joint Surgery* 55B: 390-401.
- MacMillan J, Schaffer JL Et Kambin P (1991) Routes and incidence of communication of lumbar discs with surrounding neural structures. *Spine*:16:167-171.
- Maitland G (1985) The slump test: examination and treatment. *Australia Journal of Physiotherapy* 31:215-219.
- Maitland GD (1986) *Vertebral Manipulation*, 6th edn. Butterworths, London.
- Margulies SS, Meaney DF, Bilston LB, et al. (1992) In vivo motion of the human cervical spinal cord in extension and flexion. *Proceeding of the International IRCOBI Conference on the Biomechanics of Impacts*.
- McCarron RF, Wimpee MW, Hudkins PG, et al. (1987) The inflammatory effect of nucleus pulposus: a possible element in the pathogenesis of low-back pain. *Spine* 12:760-764.
- McLellan DL Et Swash M (1976) Longitudinal sliding of the median nerve during movements of the upper limb. *Journal of Neurology, Neurosurgery, and Psychiatry* 39:566-570.
- Millesi H (1986) The nerve gap: theory and clinical practice. *Hand Clinics* 2:651-663.
- Millesi H, Zoch G Et Rihsner R (1995) Mechanical properties of peripheral nerves. *Clinical*

Orthopaedics and Related Research 314:76-83.

- Muhle c, Wiskirchen J, Weinert D, et al. (1998) Biomechanical aspects of the subarachnoid space and cervical cord in healthy individuals examined with kinematic magnetic resonance imaging. *Spine* 23:556-567.
- Murphy RW (1977) Nerve roots and spinal nerves in degenerative disk disease. *Clinical Orthopaedics and Related Research* 129:46-60.
- Murzin VE Et Goriunov VN (1979) Study of strenght of fixation of dura mater to the cranial bones. *Zhural Voprosy Neurokhirurgii Imeni* 4:43-47.
- Nagakawa H, Mikawa Y Et Watanabe R (1994) Elastin in the human posterior longitudinal ligament and spinal dura. A histologic amd biomechanical study. *Spine* 19:2164-2169.
- Nakamichi K Et Tachibana S (1995) Restricted motion of the median nerve in carpal tunnel syndrome. *Journal of Hand Surgery* 20B:460-464.
- Nathan H (1987) Osteophytes of the spine compressing the sympathetic trunk and splanchnic nerves in the thorax. *Spine* 12:527-532.
- Nicholas DS Et Weller RO (1988) The fine anatomy of the human spinal meninges. *Journal of Neurosurgery* 69:276-282.
- Ochoa J Et Marotte L (1973) Nature of the nerve lesion underlying chronic entrapment. *Journal of Neurological Science* 19:491-499.
- Ochoa JL ed. (1998) Nerve fibre pathology in acute and chronic compression, 2nd edn. WB Saunders, Philadelphia.
- Ochs S (1984) Basic properties of axoplasmic transport. In: Dyck PJ, Thomas PK, Lambert EH et al. (eds.) *Peripheral Neuropathy*, 2nd edn. WB Saunders, Philadelphia.
- O'Driscoll SW, Horii E, Carmichael SW, et al. (1991) The cubital tunnel and ulnar neuropathy. *Journal of Bone and Joint Surgery* 73B:613-617.
- Ogata K Et Naito M (1986) Blood flow of peripheral nerve: Effects of dissection, stretching and compression. *Journal of Hand Surgery* 11B:10-14.
- Olmarker K, Rydevik B Et Nordborg C (1993) Autologous nucleus pulposus induces neurophysiologic and histologic changes in procine cauda equina nerve roots. *Spine* 18:1425-1432.
- Panjabi MM, Takata K Et Goel VK (1983) Kinematics of lumbar intervertebral foramen. *Spine* 8:348-357.
- Parke WW (1988) Correlative anatomy of cervical spondylotic myelopathy. *Spine*: 13:831-837.
- Parke WW Et Watanabe R (1985) The intrinsic vasculature of the lumbosacral spinal nerve roots. *Spine* 10:508-515.
- Parke WW Et Watanabe R (1990) Adhesion of the ventral lumbar dura:ah adjunct source of

discogenic pain? Spine 15:300-303.

- Parke WW Et Whalen JL (1993) The pial ligaments of the anterior spinal artery and their stretch receptors. Spine 18:1542-1549.
- Parkin IG Et Harrison GR (1985) The topographical anatomy of the lumbar epidural space. Journal of Anatomy 141:211-217.
- Pechan J Et Julis F (1975) The pressure measurement in the ulnar nerve: a contribution to the pathophysiology of cubital tunnel syndrome. Journal of Biomechanics 8:75-79.
- Penfield W Et McNaughton F (1940) Dural headache and the innervation of the dura mater. Archives of Neurology and Psychiatry 44:43-75
- Penning L (1992) Functional pathology of lumbar spinal stenosis. Clinical Biomechanics 7:3-17.
- Penning L Et Wilmink JT (1987) Posture- dependent bilateral compression of L4 or L5 nerve roots in facet hypertrophy. Spine 12:488-500.
- Per Ohlin CO Et Elmqvist D (1985) Pressures recorded in ulnar neuropathy. Acta Orthopaedica Scandinavica 56:404-412.
- Powell HC Et Myers RR (1986) Pathology of experimental nerve compression. Laboratory Investigation 55:91-100.
- Rauschnig W (1997) Anatomy and pathology of the cervical spine. In: Frymoyer JW (ed.) The Adult Spine: Principles and Practice, 2nd edn. Lippincott-Raven, Philadelphia.
- Reid JD (1960) Effects of flexion-extension movements of the head and spine upon the spinal cord and nerve roots. Journal of Neurology, Neurosurgery, and Psychiatry 23:214-221.
- Rempel D, Bach JM, Richmond CA, et al. (1998) Effects of forearm pronation/supination on carpal tunnel pressure. Journal of Hand Surgery 23A: 38-42.
- Rempel D, Dahlin L Et Lundborg G (1999) Pathophysiology of nerve compression syndromes: response of peripheral nerves to loading. Journal of Bone and Joint Surgery 81A: 1600-1610.
- Rempel D, Keir P, Smutz WP, et al. (1997) Effects of static fingertip loading on carpal tunnel pressure. Journal of Orthopedic Research 15:422-426.
- Ravel M, Amor B, Mathieu A, et al. (1988) Sciatica induced by primary epidural adhesions. Lancet 1:527-528.
- Rossitti S (1993) Biomechanics of the pons-cord tract and its enveloping structures: an overview. Acta Neurochirurgica 124:144-152.
- Rutten HP, Szpak K Et van Mameren H (1997) Letters. Spine 22:924-928.
- Rydevik B, Brown MD Et Lundborg G (1984) Pathoanatomy and pathophysiology of nerve root compression. Spine 9:7-15.

- Rydevik B, Lundborg G Et Bagge U (1981) Effects of graded compression on intraneural blood flow: An in-vivo study on rabbit tibial nerve. *Journal of Hand Surgery* 6:3-12.
- Rydevik B, Lundborg G Et Skalak R (1989) Biomechanics of peripheral nerves. In: Nordin N Et Frankel VH (eds.) *Basic Biomechanics of the Musculoskeletal System*, 2nd edn. Lea and Febiger, Philadelphia.:75-87.
- Sauer SK, Bove GM, Averbek B, et al. (1999) Rat peripheral nerve components release calcitonin gene-related peptide and prostaglandin E2 in response to noxious stimuli: evidence that the nervi nervorum are nociceptors. *Neuroscience* 92:319-325.
- Savolaine ER, Pandja JB, Greenblatt EH, et al. (1988) Anatomy of the lumbar epidural space: new insights using CT-epidurography. *Anesthesiology* 68:217-223.
- Scapinelli R (1990) Anatomical and radiologic studies an the lumbosacral meningovertebral ligaments of humans. *Journal of Spinal Disorders* 3:6-15.
- SchonstromN, Lindahl S, Willen J, et al. (1989) Dynamic changes in the dimension of the lumbar spinal canal: An experimental study in vitro. *Journal of Orthopedic Research* 7:115-121.
- Schuind FA, Goldschmidt D, Bastin C, et al. (1995) A biomechanical study of the ulnar nerve at the elbow. *Journal of Hand Surgery* 20B:623-627.
- Selveratnam PJ, Matyas TA Et Glasgow EF (1994) Noninvasive discrimination of brachial plexus involvement in upper limb pain. *Spine* 19:26-33.
- Shacklock M (1995) Neurodynamics. *Physiotherapy* 81:9-16.
- Shaw Wilgis EF Et Murphy R (1986) The significance of longitudinal excursion in peripheral nerves. *Hand Clinics* 2:761-766.
- Smith CG (1956) Changes in length and position of the segments of the spinal cord with changes in posture in the monkey. *Radiology* 66:259-265.
- Smith JW (1966) Factors influencing nerve repair. *Archives of Surgery* 93:335-341.
- Sogaard I (1983) Sciatic nerve entrapment. *Journal of Neurosurgery* 58:275-276.
- Spencer DL, Irwin GS Et Miller JAA (1983) Anatomy and Significance of fixation of the lumbosacral nerve roots in sciatica. *Spine* 8:672-679.
- Spielman FJ (1982) Post lumbar puncture headache. *Headache* 22:280-283.
- Stodieck LS, Beel JA Et Lutges MW (1986) Structural properties of spinal nerve roots: Protein composition. *Experimental Neurology* 91:41-51.
- Sunderland S (1978) *Nerves and Nerve Injuries*, 3rd edn. Churchill Livingstone, Melbourne.
- Sunderland S Et Bradley KC (1949) The cross sectional area of peripheral nerve trunks devoted to nerve fibres. *Brain* 72:428-439.
- Szabo RM, Bay BK, Sharkey NA, et al. (1994) Median nerve displacement through the

carpal canal. *Journal of Hand Surgery* 19A:901-906.

- Tani S, Yamada S Et Knighton RS (1987) Extensibility of the lumbar and sacral cord: pathophysiology of the tethered spinal cord in cats. *Journal of Neurosurgery* 66:116-123.
- Tencer AF, Allen BL Et Ferguson RL (1985) A biomechanical study of thoracolumbar spine fractures with bone in the spinal canal: part 111. Mechanical properties of the dura and its tethering ligaments. *Spine* 10:741-747.
- Thomas PK (1963) The connective tissue of peripheral nerve: an electron microscope study. *Journal of Anatomy* 97:35-44.
- Thomas PK Et Olsson Y (1984) Microscopic anatomy and function of the connective tissue components of peripheral nerve. In: Dyck PJ, Thomas PK, Lambert EH et al. (eds.) *Peripheral Neuropathy*, 2nd edn. Saunders, Philadelphia.
- Valls-Sole, Alvarez R Et Nunez M (1995) Limited longitudinal sliding of the median nerve payients with carpal tunnel syndrome. *Muscle Et Nerve* 18:761-767.
- van Meeteren NL, Brakee JH, Helders PJ, et al. (1997) Functional recovery from sciatic nerve crush lesion in the rat correlates with individual differences in responses to chronic intermittent stress. *Journal of Neuroscience Research* 48:524-532.
- Vandam LD (1992) Symptoms following lumbar puncture may be related to decreased cerebrospinal fluid pressure and/or venous dilation. *Anesthesiology* 76:321.
- Von Lanz T (1929) Über die Rückenmarkshaute. 1. Die Konstruktive form der harten haut des menschlichen rücken markes und ihrer bündel. *Arch Entwickl Mech Org* 118:252-307.
- Wall EJ, Massie JB, Kwan MK, et al. (1992) Experimental stretch neuropathy. *Journal of Bone and Joint Surgery* 74B:126-129.
- Weinstein JN (1997) Pain. In: Frymoyer JW (ed.) *The Adult Spine: Principles and Practice*, Lippincott-Raven, Philadelphia.
- Weiss ND, Gordon L, Bloom T, et al. (1995) Position of the wrist associated with the lowest carpal-tunnel pressure: Implications for splint design. *Journal of Bone and Joint Surgery* 77A:1695-1699.
- Werner CO, Elmquist D Et Ohlin T (1983) Pressure and nerve lesions in the carpal tunnel. *Acta Orthopædica Scandinavica* 54:312-316.
- Westmoreland BF, Benaroch EE, Daube JR, et al. (1994) *Medical Neurosciences*, 3rd edn. Little, Brown and Company Boston.
- Wiltse LL, Foseca AS, Amster J, et al. (1993) Relationship of the dura, Hofmann's ligaments, Batson's plexus and a fibrovascular membrane lying on the posterior surface of the vertebral bodies and attaching to the deep layer of the posterior longitudinal ligament. *Spine* 18:1030-1043.
- Wirth FP Et van Buren JM (1971) Referral of pain from dural stimulation in man. *Journal of*

Neurosurgery 34:630-642.

- Wright TW, Glowczewski F, Wheeler D, et al. (1996) Excursion and strain of the median nerve. *Journal of Bone and Joint Surgery* 78A:1897-1903.
- Yoo JU, Zou D, Edwards WT, et al. (1992) Effect of cervical spine motion on the neuroforaminal dimensions of human cervical spine. *Spine* 17:1131-1136.
- Yuan Q, Dougherty L Et Margulies SS (1998) In vivo human spinal cord deformation and displacement in flexion. *Spine* 23:1677-1683.
- Zarzur E (1996) Mechanical properties of the human lumbar dura mater. *Arquivos de Neuropsiquitria* 54:455-460.
- Zoch G, Reihner R, Beer R, et al. (1991) Stress and strain in peripheral nerves. *Neuro-Orthopedics* 10:73-82.

### **Palpazione e orientamento del sistema nervoso periferico**

- Anthony M (1992) Headache and the greater occipital nerve. *Clinical Neurology and Neurosurgery* 94:297-301.
- Apfelberg DB Et Larson SJ (1973) Dynamic anatomy of the ulnar nerve at the elbow. *Plastic and Reconstructive Surgery* 51:76-81.
- Backhouse KM Et Hutchings RT (1986) *A Colour Atlas of Surface Anatomy*, Wolfe Medical Publications, London.
- Bogduk N (1981) The anatomy of occipital neuralgia. *Clinical and Experimental Neurology* 17:167-184.
- Bove GM Et Light AR (1997) The nervi nervorum. *Pain Forum* 6:181-190.
- Budak F Et Gonenc Z (1999) Innervation anomalies in upper and lower extremities (an electrophysiological study). *Electromyography and Clinical Neurophysiology* 39:231-234.
- Butler DS (1991) *Mobilisation of the Nervous System*, Churchill Livingstone, Melbourne.
- Childress HM (1975) Recurrent ulnar-nerve dislocation at the elbow. *Journal of Bone and Joint Surgery* 38A:978-984.
- Clemente CD (1975) *Anatomy. A Regional Atlas of the Human Body*, Urban Et Schwarzenberg, Munich.
- Clifton EE (1948) Unusual innervation of the intrinsic muscles of the hand by the median and ulnar nerves. *Surgery* 23:12-19.
- Dellon AL, Schneider R Et Burke R (1983) Effect of acute compartmental changes upon response to vibratory stimuli. *Plastic and Reconstructive Surgery* 72:208-216.
- Devor M Et Seltzer Z (1999) Pathophysiology of damaged nerves in relation to chronic pain. In: Wall PD Et Melzack R (eds.) *Textbook of Pain*, 4th edn. Churchill Livingstone, Edinburgh.



- Durkan JA (1991) A new diagnostic test for carpal tunnel syndrome. *Journal of Bone and Joint Surgery* 73A:536-538.
- Ferkel RD, Heath DD Et Guhl JF (1996) Neurological complications of ankle arthroscopy. *Arthroscopy* 12:200-208.
- Fetrow KO (1970) Practical and important variations in the sensory supply to the hand. *Hand* 2:178-186.
- Field D (1994) *Anatomy: Palpation and Surface Markings*, Butterworth-Heinemann Ltd., Oxford.
- Gellman H, Gelberman RH, Tan AM, et al. (1986) Carpal tunnel syndrome, An evaluation of the provocative diagnostic tests. *Journal of Bone and Joint Surgery* 68A: 735-737.
- Golding DN, Rose DM Et Selvarajah K (1986) Clinical tests for carpal tunnel syndrome: an evaluation. *British Journal of Rheumatology* 25:388-390.
- Goldner JL Et Hall RI (1997) Nerve entrapment syndromes of the lower back and lower extremities. In: Omer GE, Spinner M Et Van Beek Al (eds.) *Management of Peripheral Nerve Problems*, 2nd edn. W.B. Saunders, Philadelphia.
- Gozalez del Pino JG, Delgado-Martinez AD, Gonzalez-Gonzalez I, et al. (1997) Value of the carpal compression test in the diagnosis of carpal tunnel syndrome. *Journal of Hand Surgery* 22B:38-41.
- Harness D Et Sekeles E (1971) The double anastomotic innervation of thenar muscles. *Journal of Anatomy* 109:461-466.
- Hunter CR Et Mayfield FH (1949) Role of the upper cervical roots in the production of pain in the head. *American Journal of Surgery* 78:734-749.
- Jabre JF (1994) "Nerve Rubbing" in the symptomatic treatment of ulnar nerve paraesthesiae. *Muscle Et Nerve* 17:1237-.
- Keogh B Et Ebbs S (1984) *Normal Surface Anatomy*, William Heinmann, London.
- Kopell HP Et Thompson WAL (1963) *Peripheral Entrapment Neuropathies*, Williams and Wilkins, Baltimore.
- Lebovic SJ Et Hastings H (1992) Martin-Gruber revisited. *Journal of Hand Surgery* 17A:47-53.
- Lee DH Et Dick HM (1998) Management of peripheral nerve tumors. In: Omer GE, Spinner M Et Van Beek AL (eds.) *Management of Peripheral Nerve Problems*, 2nd edn. W.B. Saunders, Philadelphia.
- Lumley JSP Et 1996 (1996) *Surface Anatomy: The Anatomical Basis of Clinical Examination*, Butterworth-Heinemann, London.
- Mackinnon SE Et Dellon AL (1985) The overlap pattern of the lateral antebrachial cutaneous nerve and the superficial branch of the radial nerve. *Journal of Hand Surgery* 11A:522-526.

- Mackinnon SE Et Dellon AL (1988) *Surgery of the Peripheral Nerve*, Thieme, New York.
- Maigne JY Et Maigne R (1991) Trigger point of the posterior iliac crest: painful iliolumbar ligament insertion or cutaneous dorsal ramus pain? An anatomic study *Archives of Physical Medicine and Rehabilitation* 72:734-737.
- Marzo JM, Simmons EH Et Kallen F (1987) Intradural connections between adjacent cervical spinal roots. *Spine* 12:964-968.
- McMinn RMH Et Hutchings RT (1988) *A colour Atlas of Human Anatomy*, 2nd edn. Wolfe Medical, London.
- Mersdorf A, Schmidt RA Et Tanagho EA (1993) Topographic-anatomical basis of sacral neurostimulation: neuroanatomical variations. *Journal of Urology* 149:345-349.
- Mochida H Et Kikuchi S (1995) Injury to the infrapatellar branch of the saphenous nerve in arthroscopic knee surgery. *Clinical Orthopaedics and Related Research* 320:88-94.
- Monsivais JJ Et Sun Y (1997) Tinel's sign or percussion test? Developing a better method of evoking a Tinel's sign. *Journal of the Southern Orthopaedic Association* 6:186-189.
- Mumenthaler M Et Schliack H (1991) *Peripheral Nerve Lesions*, Thieme, New York.
- Narakas A (1989) Compression syndromes about the shoulder including brachial plexus. In: Szabo RM (ed.) *Nerve Compression Syndromes*, Slack, Thorofare.
- Netter FH (1987) *The CIBA Collection of Medical Illustrations*, CIBA-Geigy Corporation, Summit, New Jersey.
- Novak CB, Lee GW, Mackinnon SE, et al. (1994) Provocative testing for cubital tunnel syndrome. *Journal of Hand Surgery* 19A: 817-820.
- Ortiguela ME, Wood MD Et Cahill DR (1987) Anatomy of the sural nerve. *Journal of Hand Surgery* 12A: 1119-1123.
- Pleet AB Et Massey EW (1978) Notalgia paresthetica. *Neurology* 28:1310-1313.
- Seror P (1987) Tinel's sign in the diagnosis of carpal tunnel syndrome. *Journal of Hand Surgery* 12B:364-365.
- Spicher C, Kohut G Et Miauton J (1999) at wich stage of sensory recovery can a tingling sign be expected? *Journal of Hand Therapy* 12:298-308.
- Stewart JD (1993) *Focal Peripheral Neuropathies*, 2nd edn. Raven Press, New York.
- Sunderland S (1945) The internal topography of the radial, median and ulnar nerves. *Brain* 68:243-250.
- Sunderland S (1978) *Nerves and Nerve Injuries*, 3rd edn. Churchill Livingstone, Melbourne.
- Sunderland S Et Bradley KC (1949) The cross sectional area of peripheral nerve trunks devoted to nerve fibres. *Brain* 72:428-439.

- Szabo RM (1989) Nerve Compression Syndromes, Slack, Thorofare NJ.
- Tanaka N, Fujimoto Y, An HS, et al. (2000) The anatomic relation among the nerve roots, intervertebral foramina, and the intervertebral discs of the cervical spine. *Spine* 25:286-291.
- Tennent TD, Birch NC, Holmes MJ, et al. (1998) Knee pain and the infrapatellar branch of the saphenous nerve. *Journal of the Royal Society of Medicine* 91:573-575.
- Thomas PK (1984) Clinical features and differential diagnosis. In: Dyck PJ, Thomas PK, Lambert EH et al. (eds.) *Peripheral Neuropathy*, 2nd edn. Saunders, Philadelphia.
- Tinel J (1915) Le signe du "fourmillement" dans les lésions des nerfs périphériques. *Presse Medicale* 47:388-389.
- Tountas CP Et Bergman RA (1993) *Anatomic Variations of the Upper Extremity*, Churchill Livingstone, New York.
- Vasramaki M Et Goransson H (1993) Suprascapular nerve entrapment. *Clinical Orthopaedics and Related Research* 297:135-143.
- Werner Co, Rosen I Et Thorngren KT (1985) Clinical and neurophysical characteristics of the pronator syndrome. *Clinical Orthopaedics and Related Research* 197:231-236.
- Williams RP Et Sugars W (1998) Lumbar root innervation of the medial foot and ankle region. *Australian and New Zealand Journal of Surgery* 68:565-567.

### **I test neurodinamici in clinica**

- Breig A Et Troup J (1979) Biomechanical considerations in the straight leg raising test. *Spine* 4:242-250.
- Bronson J, Beck J, Gillet J. (1997) Provocative motor nerve conduction testing in presumptive carpal tunnel syndrome unconfirmed by traditional electrodiagnostic testing. *Journal of Hand Surgery* 22A: 1041-1046.
- Butler DS (1991) *Mobilisation of the Nervous System*, Churchill Livingstone, Melbourne.
- Coppieters MW, Stappaerts KH Et Staes FF (1999) A qualitative assessment of shoulder girdle elevation during the upper limb tension test 1. *Manual Therapy* 4:33-38.
- Coulier B (2000) Evaluation of lumbar canal stenosis: decubitus imaging methods versus flexion-extension myelography and surface measurements versus the diameter of the dural sac. *Journal Belge de Radiologie* 83:61-67.
- Dibden K (1996) A comparison of straight leg raising manoeuvres in supine and sitting in an asymptomatic population. Thesis, School of Physiotherapy of South Australia, Adelaide.
- Finkelstein H (1930) Stenosing tenosynovitis at the radial styloid process. *Journal of Bone and Joint Surgery* 12A:509-539.
- Johnson EK Et Chiarello CM (1997) The slump test: the effects of head and lower extremity position on knee extension. *Journal of Orthopedic and Sports Physical Therapy* 26:310-317.

- Kupfer DM, Bronson J, Lee GW (1998) Differential latency testing. *Journal of Hand Surgery* 23A:859-864.
- Mackinnon SE Et Dellon A (1988) *Surgery of the Peripheral Nerve*, Thieme, New York.
- Maitland GD (1986) *Vertebral Manipulation*, 6th edn. Butterworths, London.
- Massey A (1985) Movement of pain sensitive structures in the neural canal. In: Greive GP (ed.) *Modern Manual Therapy of the vertebral column*, Churchill Livingstone, Edinburgh.
- Penning L (1992) Functional pathology of lumbar spinal stenosis. *Clinical Biomechanics* 7:3-17.
- Rubenach H (1985) The upper limb tension test: the effect of the position and movement of the contralateral arm. In: *Proceedings, Manipulative Physiotherapists Association of Australia, 4th biennial conference.*, Brisbane.
- Shacklock Mo (1996) Positive upper limb tension test in a case of surgically proven neuropathy. *Manual Therapy* 1:154-161.
- Supik LF Et Broom MJ (1994) Sciatic tension signs and lumbar disc herniation. *Spine* 19:1066-1069

### **Strategie di Management – integrazione della neurodinamica**

- Abenhaim L, Rossignol M, Valat JP, et al. (2000) The role of activity on the therapeutic management of back pain. *Spine* 25:1S-33S.
- Achterberg J (1996) What is medicine? *Alternative Therapies* 2:58-61.
- AHCPR (1994) *Clinical Practice Guideline Number 14. Acute low back problems in adults.* Agency for Health Care Problems and Research. US Department of Health and Human Services. Rockville, MD.
- Aita JF (1984) An unusual compressive neuropathy. *Archives of Neurology* 41:341-343.
- Akyuz G, Us O, Turan B, et al. (2000) Anterior tarsal tunnel syndrome. *Electromyography and Clinical Neurophysiology* 40:123-128.
- Asmussen E Et Boeje OVE (1945) Body temperature and capacity for work. *Acta Physiologica Scandinavica* 10:1-22.
- Beurskens AJ, de Vet HC, Koke AJ, et al. (1997) Efficacy of traction for nonspecific low back pain. 12-week and 6 month results of randomised clinical trial. *Spine* 23:2756-2672
- Borges LF, Hallet M, Seljoe DJ, et al (1981) The anterior tarsal tunnel syndrome. *Journal of Neurosurgery* 54:89-92.
- Braddom RL Et Wolfe C (1978) Musculocutaneous nerve injury after heavy exercise. *Archives of Physical medicine and Rehabilitation* 59:290-292.
- Breig A (1978) *Adverse Mechanical Tension in the Central Nervous System*, Almqvist and Wiksell, Stockholm.

- Butler DS (1989) Adverse mechanical tension in the nervous system: a model for assessment and treatment. *Australian Journal of Physiotherapy* 35:227-238.
- Butler DS (1991) *Mobilisation of the Nervous System*, Churchill Livingstone, Melbourne.
- Butler DS, Shacklock MO Et Slater H (1994) Treatment of altered nervous system mechanics. In: Boyling JD Et Palastanga N (eds.) *Grieve's Modern Manual Therapy*, 2nd edn. Churchill Livingstone, Edinburgh.
- Caudill MA (1995) *Managing Pain before it Manages You*, Guildford Press, New York.
- Dawson DM, Hallet M Et Wilbourn AJ (1999) *Entrapment neuropathies*, 3rd edn. Lippincott, Williams and Wilkins, Philadelphia.
- Deyo RA, Diehl AK Et Resenthal M (1986) How many days of bed rest for acute low back pain? A randomised clinical trial. *New England Journal of Medicine* 315:1064-1070.
- Drye C Et Zachazewski JE (1996) Peripheral nerve injuries. In: Zachazewski JE, Magee DJ Et Quillen WS (eds.) *Athletic Injuries and Rehabilitation*, WB Saunders, Philadelphia.
- Elvey RL (1986) Treatment of arm pain associated with abnormal brachial plexus tension. *The Australian Journal of Physiotherapy* 32:225-230.
- Elvey RL Et Hall T (1997) Neural tissue evaluation and treatment. In: Donatelli R (ed.) *Physical Therapy of the Shoulder*, Churchill Livingstone, New York.
- Fabian RH, Norcross KA Et Hancock MB (1987) Surfer's neuropathy. *New England Journal of Medicine* 316:555.
- Frank JD (1973) *Persuasion and Healing*, Johns Hopkins University Press, Baltimore.
- Friendland RP Et St John JN (1984) Video-game palsy: distal ulnar neuropathy in a video-game enthusiast. *New England Journal of Medicine* 319:450.
- Gatchel RJ, Polatin PB Et Kinney RK (1995) Predicting outcome of chronic back pain using clinical predictors of psychopathology 14:415-420.
- Gerteis M, Edgman-Levitan S Et Daley J eds. (1993) *Understanding and Promoting Patient-Centred Care: Through Patient's Eyes*, Jossey Bass, San Francisco.
- Gifford LS (1998) Factors influencing movement-neurodynamics. In: Pitt-Brooke J, Reid H, Lockwood J et al. (eds.) *Rehabilitation of Movement*, WB Saunders, London.
- Gifford LS (1998) Pain, the tissue and the nervous system. *Physiotherapy* 84:27-33.
- Goldner JL Et Hall RL (1997) Nerve entrapment syndromes of the lower back and lower extremities. In: Omer GE, Spinner M Et Van Beek AL (eds.) *Management of Peripheral Nerve Problems*, 2nd edn. W.B. Saunders, Philadelphia.
- Hall TM Et Elvey RL (1999) Nerve trunk pain: physical diagnosis and treatment. *Manual Therapy* 4:63-73.
- Harding V (1998) Application of the cognitive-behavioural approach. In: Pitt-Brooke J (ed.)

Rehabilitation of Movement, Saunders, London.

- Harding V (1998) Cognitive-behavioural approach to fear and avoidance. In: Gifford LS (ed.) Topical Issues in Pain, NOI Press, Falmouth.
- Harding V Et Williams A (1995) Extending physiotherapy skills using a psychological approach: cognitive behavioural management of chronic pain. *Physiotherapy* 81:681-688.
- Hawley DJ (1995) Psychoeducational interventions in the treatment of arthritis. *Baillieres Clinical Rheumatology* 9: 803-823.
- Hershfield HB (1983) Pedaller's penis. *Canadian Medical Association Journal* 128:366-367.
- Hoff GL Et Martin TA (1986) Outdoor and indoor soccer: injuries among youth players. *American Journal of Sports Medicine* 14:231-233.
- Hopper D (1986) A survey of netball injuries and conditions related to those injuries. *Australian Journal of Physiotherapy* 32:231-239.
- Hunter JM (1991) Recurrent carpal tunnel syndrome, epineural fibrous fixation, and traction neuropathy. *Hand Clinics* 7:491-503.
- Indahl A, Velund L Et Reikeraas O (1995) Good prognosis for low back pain when left untampered: a randomized clinical trial. *Spine* 20:473-477.
- Jabre JF (1994) "Nerve rubbing" in the symptomatic treatment of ulnar nerve paraesthesiae. *Muscle Et Nerve* 17:1237.
- Johnston EC Et Howell SJ (1999) Tension neuropathy of the superficial peroneal nerve: associated conditions and results of release. *Foot Et Ankle International* 20:576-580.
- Kendall NAS, Linton SJ Et Main CJ (1997) Guide to assessing psychosocial yellow flags in acute low back pain: risk factors for long term disability and work loss, Accident Rehabilitation Et Compensation Insurance Corporation of New Zealand and the National Health Committee, Wellington.
- Koller RL Et Blank NK (1980) Strawberry pickers' palsy. *Archives of Neurology* 37:320-321.
- Lewit K (1985) *Manipulative Therapy in Rehabilitation of the Motor System*, Butterworths, London.
- Linton SJ (1998) The socioeconomic impact of chronic back pain: is anyone benefiting? *Pain* 75:163-168.
- Mackinnon SE, Dellon AL, Hudson AR, et al. (1986) Histopathology of compression of the superficial radial nerve in the forearm. *Journal of Hand Surgery* 11A:206-209.
- Maitland GD (1986) *Vertebral Manipulation*, 6th edn. Butterworths, London.
- Malmivaara A, Hakkinen U Et Aro T, et al (1995) The treatment of acute low back pain-bed rest, exercises, or ordinary activity? *The New England Journal of Medicine* 332:351-355.

- Malone TR, Garrett WE Et Zachazewski JE (1996) Muscle: Deformation, injury, repair. In: Zachazewski JE, Magee DJ Et Quillen WS (eds.) Athletic Injuries and Rehabilitation, WB Saunders, Philadelphia.
- Marinacci AA (1967) The value of the electromyogram in the diagnosis of pressure neuropathy from "hanging arm". *Electromyography* 7:5-15.
- Massey EW Et Pleet AB (1978) Handcuffs and cheiralgia parasthetica. *Neurology* 28:1312-1313.
- McKinnon ME, Vickers MR, Ruddock VM, et al. (1997) Community studies of the healthy service implications for low back pain. *Spine* 22:2161-2166.
- Mellion MB (1991) Common cycling injuries: management and prevention. *Sport Medicine* 11:52-57.
- Mendoza FX Et Main K (1990) Peripheral nerve injuries of the shoulder in the athlete. *Clinics in Sports Medicine* 9:331-342.
- Moseley L (2000) The effect of Neuroscience education on pain attitudes, somatic perception and catastrophising in people with chronic low back pain. Australian Pain Society Annual Conference. *The Progress of Pain*, Melbourne.
- Mumenthaler M Et Schliack H (1991) *Peripheral nerve Lesions*, Thieme, New York.
- Nathan PA Et Keniston RC (1993) Carpal tunnel syndrome and its relation to general physical condition. *Hand Clinics* 9:235-261.
- Nathan PA, Keniston RC Et Meadows KD (1995) Outcome study of ulnar nerve decompression at the elbow treated with simple decompression and an early programme of physical therapy. *Journal of Hand Surgery* 20B:628-637.
- NHMRC (1998) *Acute pain management: scientific evidence*. National Health and Medical Research Council, Canberra.
- Nobel W (1966) Peroneal palsy due to hematoma in the common peroneal nerve sheath after distal torsional fractures and inversion ankle sprains: report of two cases. *Journal of Bone and Joint Surgery* 48A:1184-1195.
- O'Sullivan PB, Twomey LT Et Allison GT (1997) Evaluation of specific stabilizing exercise in the treatment of chronic low back pain with radiologic diagnosis of spondylolysis or spondylolisthesis. *Spine* 22:2959-2967.
- Paljarvi L Et Partenen J (1980) Biting palsy of the accessory nerve. *Journal of Neurology, Neurosurgery and Psychiatry* 43:744-746.
- Ramachandran VS Et Blakeslee S (1998) *Phantoms in the Brain*, William Morrow, New York.
- Ramachandran VS Et Rogers-Ramachandran D (1996) Synaesthesia in phantom limbs induced with mirrors. *Proceedings of the Royal Society of London B.* 236:377-386.

- Reisin R, Pardal A, Ruggieri V, et al. (1994) Sural neuropathy due to external pressure: report of three cases. *Neurology* 44:2408-2409.
- Ringel SP, Treihaf M, Carry M, et al (1990) Suprascapular neuropathy in pitchers. *American Journal of Sports Medicine* 18:80-86.
- Roles NC Et Maudsley RH (1972) Radial tunnel syndrome: resistant tennis elbow as a nerve entrapment. *Journal of Bone and Joint Surgery* 54B:499-508.
- Rosenfeld M, Gunnarsson R Et Borenstein P (2000) Early intervention in whiplash-associated disorders. *Spine* 25:1782-1787.
- Rozmaryn LM, Dovel S, Rothman ER, et al. (1998) Nerve and tendon gliding exercises and the conservative management of carpal tunnel syndrome. *Journal of Hand Therapy* 11:171-179.
- Sammarco GJ Et Stephens MM (1991) Neuropraxia of the femoral nerve in a modern dancer. *American Journal of Sports Medicine* 19:413-414.
- Sandblom P (1996) *Creativity and Disease*, Marion Boyars, New York.
- Savage R, Burke FD, Smith NJ, et al. (1990) Carpal tunnel syndrome in association with vibration white finger. *Journal of Hand Surgery* 15B:100-103.
- Scharli AF Et Ayer G (1984) Meralgia paraesthetica in kindersalter. *Jeans Krankheit. Kinderarzt* 15:9-12.
- Schon LC Et Baxter DE (1990) Neuropathies of the foot and ankle in athletes. *Clinics in Sports Medicine* 9:489-509.
- Seradge H (1997) Cubital tunnel release and medial epicondylectomy. *Journal of Hand Surgery* 22A:863-866.
- Seror P (1993) Treatment of ulnar nerve palsy at the elbow with a night splint. *Journal of Bone and Joint Surgery* 75B:322-327.
- Seward HG Et Patrick J (1992) A three year survey of Victorian football league injuries. *Australian Journal of Medicine and Science in Sport* 24:51-54.
- Shacklock Mo, Butler DS Et Slater H (1994) The dynamic nervous system: structure and clinical neurobiomechanics. In: Boyling JD Et Palastanga N (eds.) *Grieve's Modern Manual Therapy*, 2nd edn. Churchill Livingstone, Edinburgh.
- Shellock FG (1983) Physiological benefits of warm-up- *Physician and Sports Medicine* 11:134-139.
- Shorland S (1998) Management of chronic pain following whiplash injuries. In: Gifford LS (ed.) *Topical issue in pain*, NOI Press, Falmouth.
- Silverstein BA, Fine LJ Et Armstrong TJ (1986) Hand and wrist cumulative trauma disorders in industry. *British Journal of Industrial Medicine* 43:779-784.



- Sinclair RH Et Pratt JH (1972) Femoral neuropathy after pelvic operation. *American Journal of Obstetrics and Gynaecology* 112:404-408.
- Slater H, Butler DS Et Shacklock MO (1994) The dynamic nervous system: examination and assessment using tension tests. In: Boyling JD Et Palastanga N (eds.) *Grieve's Modern Manual Therapy*, 2nd edn. Churchill Livingstone, Edinburgh.
- Spitzer WO, Le Blanc FE Et Dupuis M (1987) Scientific approach to the assessment and management of activity-related spinal disorders: a monograph for clinicians. Report of the Quebec Task Force on Spinal Disorders. *Spine* 12:1-59.
- Sternbach RA (1987) *Mastering Pain*, Ballantine Books, New York.
- Stewart JD (1999) *Focal Peripheral Neuropathies*, 3rd edn. Lippincott, Williams and Wilkins, Philadelphia.
- Strong J (1996) *Chronic Pain: The Occupational Therapist's Perspective*, Churchill Livingstone, New York.
- Sullivan MJL, Stanish W, Waite H, et al. (1998) Catastrophizing, pain and disability in patients with soft tissue injuries *Pain* 77:253-260.
- Sunderland S (1978) *Nerves and Nerve Injuries*, 3rd edn. Churchill Livingstone, Melbourne.
- Szabo RM (1989) *Nerve Compression Syndromes*, Slack, Thorofare NJ.
- Troup JDG (1986) Biomechanics of the lumbar spinal canal. *Clinical Biomechanics* 1:31-43.
- Turner JA (1996) Educational and behavioural interventions for back pain in primary care. *Spine* 21:2851-2859.
- Turner JA, LeResche L, Von Korff M, et al. (1998) Back pain in primary care. *Spine* 23:463-469.
- Vincenzino B Et Vincenzino D (1995) Considerations in injury prevention. In: Zuluaga M, Briggs C Et Carlisle J (eds.) *Sports Physiotherapy*, Churchill Livingstone, Melbourne.
- Vlaeyen JWS, Kole-Snijders AmJ, Boeren RGB, et al. (1995) Fear of movement/(re)injury in chronic low back pain and its relation to behavioural performance. *Pain* 62:363-372.
- Waddell G (1998) *The Back Pain Revolution*, Churchill Livingstone, Edinburgh.
- Waddell G, Feder G, McIntosh A, et al. (1996) *Low back pain evidence review*, Royal College of General Practitioners, London.
- Wittink H Et Michel TH (1997) *Chronic Pain Management for Physical Therapists*, Butterworth-Heinemann, Boston.
- Young AW, Redmond AD Et Belandres PV (1990) Isolated lesions of the lateral cutaneous nerve of the forearm. *Archives of Physical Medicine and Rehabilitation* 71:251-252.
- Zoli M, Torri C Et Ferrari R (1998) The emergence of the volume transmission concept. *Brain Research Review* 26:136-147.

- Zvulun I (1998) Mobilizing the nervous system in cervical cord compression. *Manual Therapy* 3:42-47.

### **Aspetti clinici della Neurodinamica**

- Augustijn P Et Vanneste J (1992) The tarsal tunnel syndrome after a proximal lesion. *Journal of Neurology, Neurosurgery and Psychiatry* 55:65-67.
- Baxter D Et Thingpen CM (1984) Heel pain-operative results. *Foot and Ankle International* 5:16-25.
- Bednarik J, Zadanka Z Et Vohanka S (1999) Median nerve neuropathy in spondylotic cervical myelopathy: double crush syndrome. *Journal of Neurology* 246:541-545.
- Butler DS (1991) *Mobilisation of the Nervous System*, Churchill Livingstone, Melbourne.
- Butler DS Et Slater H (1994) Neural injury in the thoracic spine: a conceptual basis for manual therapy. In: Grant R (ed.) *Physical Therapy of the Cervical and Thoracic Spine*, 2nd edn. Churchill Livingstone, New York.
- Coveney B, Trott P, Grimmer KA, et al. (1997) The upper limb tension test in a group of subjects with a clinical presentation of carpal tunnel syndrome. In *Proceedings: Tenth Biennial Conference: Manipulative Physiotherapists Association of Australia*, Melbourne.
- Dahlin LB, Archer DR Et McLean WG (1993) Axonal transport and morphological changes following nerve compression. An experimental study in the rabbit vagus nerve. *Journal of Hand Surgery* 18B: 106-110.
- Dahlin LB, Nordborg C Et Lundborg G (1987) Morphological changes in nerve cell bodies induced by experimental graded compression. *Experimental Neurology* 95:611-617.
- Daniels TR, Lau JT Et Hearn TC (1998) The effects of foot position and load on tibial nerve tension. *Foot Et Ankle International* 19:73-78.
- Davidson RI, Dunn EJ Et Metzmaker JN (1981) The shoulder abduction test in the diagnosis of radicular pain in cervical extradural compressive monoradiculopathies. *Spine*: 6:441-445.
- Davis PF, Severud E Et Baxter DE (1994) Painful heel syndrome: results of monopoperative treatment. *Foot and Ankle International* 15:531-535.
- Dellon AL Et Mackinnon SE (1991) Chronic nerve compression model for the double crush hypothesis. *Annals of plastic Surgery* 26:259-264.
- Devor M Et Seltzer Z (1999) Pathophysiology of damaged nerves in relation to chronic pain. In: Wall PD Et Melzack R (eds.) *Textbook of Pain*, 4th edn. Churchill Livingstone, Edinburgh.
- Durkan JA (1991) A new diagnostic test for a carpal tunnel syndrome. *Journal of Bone and Joint Surgery* 73A: 536-538.
- Fast A, Parikh S Et Marin E (1989) The shoulder abduction relief sign in cervical radiculopathy. *Archives of Physical Medicine and Rehabilitation* 70:403-403.

- Garfinkel MS, Singhal A, Katz WA, et al. (1998) Yoga-based intervention for carpal tunnel syndrome: a randomized trial. *Journal of the American Medical Association* 280:1601-1603.
- Goldner JL Et Hall RL (1997) Nerve entrapment syndromes of the lower back and lower extremities. In: Omer GE, Spinner M Et Van Beek AL (eds.) *Management of Peripheral Nerve Problems*, 2nd edn. WB Saunders, Philadelphia.
- Golovchinsky V (1998) Double crush syndrome in lower extremities. *Electromyography and clinical Neurophysiology* 38:115-120.
- Goulden V, Highett AS Et Shamy HK (1994) Notalgia paresthetica – report of an association with macular amyloidosis. *Clinical and Experimental Dermatology* 19:346-349.
- Gunn CC Et Milbrandt WE (1976) Tennis elbow and the cervical spine. *Canadian Medical Journal* 8:803-809.
- Gunnarsson LG, Amilon A, Hellstrand P, et al. (1997) The diagnosis of carpal tunnel syndrome. *Journal of Hand Surgery* 22B:34-37.
- Henricson AS Et Westlin NE (1984) Chronic calcaneal pain in athletes: Entrapment of the calcaneal nerve? *American Journal of Sports Medicine* 12:152.
- Hurst LC, Weissberg D Et Carroll RE (1985) The relationship of the double crush to carpal tunnel syndrome: (an analysis of 1,000 cases of carpal tunnel syndrome). *Journal of Hand Surgery* 10B:202-205.
- Idler RS (1996) Persistence of symptoms after surgical release of compressive neuropathies and subsequent management. *Orthopedic Clinics of North America* 27:409-416.
- Johnston EC Et Howell SJ (1999) Tension neuropathy of the superficial peroneal nerve: associated conditions and results of release. *Foot Et Ankle International* 20:576-580.
- Kleinrensink GJ, Stoeckart R, Meulstee J, et al. (1994) Lowered motor conduction velocity of the peroneal nerve after inversion trauma. *Medicine and Science in Sport* 26:877-883.
- Kleinrensink GJ, Stoeckart R, Mulder PGH, et al. (2000) Upper limb tension tests as tools in the diagnosis of nerve and plexus lesions. *Clinical Biomechanics* 15:9-14.
- Kornberg C Et Lew P (1989) The effect of stretching neural structures on grade one hamstring injuries. *Journal of Orthopedic and Sports Physical Therapy* June:481-487.
- LaBan MM , MacKenzie JR Et Zemenick GA (1989) Anatomic observations in carpal tunnel syndrome as they relate to the tethered median nerve stress test. *Archives of Physical Medicine and Rehabilitation* 70:44-46.
- Layton AM Et Cotterill JA (1991) Notalgia paraesthetica – report of three cases and their treatment. *Clinical and Experimental Dermatology* 16:197-198.
- Lipschitz M, Bernstein-Lipschitz L Et Nathan H (1988) Thoracic sympathetic trunk compression by osteophytes associated with arthritis of the costovertebral joint. *Anatomical and clinical considerations. Acta Anatomica* 132:48-54.

- Lundborg G (1988) Nerve Injury and Repair, Churchill Livingstone, Edinburgh.
- Mackinnon SE (1992) Double and multiple “crush” syndromes. *Hand Clinics* 8:369-390.
- Mackinnon SE Et Dellon AL (1988) *Surgery of the Peripheral Nerve*, Thieme, New York.
- Maigne JY Et Maigne R (1991) Trigger Ppoint of the posterior iliac crest: painful iliolumbar ligament insertion or cutaneous dorsal ramus pain? An anatomic study. *Archives of Physical Medicine and Rehabilitation* 72:734-737.
- Maitland GD (1986) *Vertebral Manipulation*, 6th edn. Butterworths, London.
- Mauhart D (1990) The effect of chronic ankle inversion sprains on the plantarflexion/inversion straight leg raise test (abstract). *Australian Journal of Physiotherapy* 36:277.
- Millesi H, Zoch G Et Riehsner R (1995) Mechanical properties of peripheral nerves. *Clinical Orthopedics and Related Research* 314:76-83.
- Mimori K, Muneta T, Komori H, et al. (1999) Relation between the painful shoulder and the cervical spine with narrow canal in patients without abvious radiculopathy. *Journal of Shoulder and Elbow Surgery* 8:303-306.
- Murphey F, Simmons JC Et Brunson B (1973) Ruptures cervical discs, 1939-1972. *Clinical Neurosurgery* 20:9-17.
- Narakas A (1989) Compression syndromes about the shoulder including brachial plexus. In: Szabo RM (ed.) *Nerve Compression Syndromes*, Slack, Thorofare.
- Nathan H (1987) Osteophytes of the spine compressing the sympathetic trunk and splanchnic nerves in the thorax. *Spine* 12:527-532.
- Nathan PA, Meadows KD Et Keniston RC (1993) Rehabilitation of carpal tunnel surgery patients using and an early program of physical therapy. *Journal of Hand Surgery* 18A:1044-1050.
- Nemoto K, Matsumoto N, Tagaki K, et al. (1987) An experimental study on the “double crush” hypothesis. *Journal of Hand Surgery* 12:552-559.
- Nitz AJ, Dobner JJ Et Kersey D (1985) Nerve injury and grades II and III ankle sprains. *The American Journal of Sports Medicine* 13(3):177-182.
- Nobel W (1966) Peroneal palsy due to hematoma in the common peroneal nerve sheaths after distal torsional fractures and inversion ankle sprains: report of two cases. *Journal of Bone and Joint Surgery* 48A:1184-1195.
- Ochoa JL, Cline M, Dotson R, et al. (1987) Pain and paraesthesias provoked mechanically in human cervical root entrapment (sign of Spurling). Single sensory unit antidromic recording of ectopic, bursting, propagated nerve activity. In: Pbols LM Et Sessle BJ (eds.) *Effects of Injury on Trigeminal and Spinal Somatosensory System*, Liss, New York.
- Olmarker K, Rydevik B Et Nordborg C (1993) Autologus nucleus pulposus induces

neurophysiologic and histologic changes in porcine cauda equina nerve roots. *Spine* 18:1425-1432.

- Osterman AL (1988) The double crush syndrome. *Orthopedic Clinics of North America* 19:147-155.
- Pahor S Et Toppenberg R (1996) An investigation of neural tissue involvement in ankle inversion sprains. *Manual Therapy* 1:192-197.
- Panjabi MM, Takata K Et Goel VK (1983) Kinematics of lumbar intervertebral foramen. *Spine* 8:348-357.
- Penning I (1992) Functional pathology of lumbar spinal stenosis. *Clinical Biomechanics* 7:3-17.
- Phalen GS (1966) The carpal-tunnel syndrome. Seventeen years experience in diagnosis and treatment of six hundred fifty four hands. *Journal of Bone and Joint Surgery* 48A:211-228.
- Phalen GS (1972) The carpal-tunnel syndrome. Clinical evaluation of 598 hands. *Clinical Orthopedics and Related Research* 83:29-39.
- Pleet AB Et Massey EW (1978) Notalgia paresthetica. *Neurology* 28:1310-1313.
- Putters JL, Kaulesar Sukul DM Et Johannes EJ (1992) Bilateral thoracic outlet syndrome with bilateral radial tunnel syndrome: a double-crush phenomenon. Case report. *Archives of Orthopedic Trauma and Surgery* 111:242-243.
- Raison-Peyron N, Meunier L, Acevedo M, et al. (1999) Notalgia paraesthetica: clinical, physiopathological and therapeutic aspects. *Journal of the European Academy of Dermatology and Venereology* 12:215-21.
- Raps SP Et Rubin M (1994) Proximal median neuropathy and cervical radiculopathy: double crush revisited. *Electromyography and Clinical Neurophysiology* 34:195-196.
- Rask MR (1978) Medial plantar neuropraxia (jogger's foot): Report of three cases. *Clinical Orthopedics and Related Research* 134:163-168.
- Reisin R, Pardal A, Ruggeri V, et al. (1994) Sural neuropathy due to external pressure: report of three cases. *Neurology* 44:2408-2409.
- Rosenbaum R (1999) Carpal tunnel syndrome and the myth of El Dorado. *Muscle Et Nerve* 22:1165-1167.
- Rozmaryn LM, Dovel S, Rothman ER, et al. (1998) Nerve and tendon gliding exercises and the conservative management of carpal tunnel syndrome. *Journal of Hand Therapy* 11:171-179.
- Saal JS, Franson RC, Doborow R, et al. (1990) High levels of inflammatory phospholipase A2 activity in lumbar disc herniation. *Spine* 15:674-678.
- Sammarco GJ, Chalk DE Et Feibel JH (1993) Tarsal tunnel syndrome and additional nerve lesions in the same limb. *Foot Ankle* 14:71-77.

- Schon LC, Glennon TP Et Baxter DE (1993) Heel pain syndrome: electrodiagnostic support for nerve entrapment. *Foot and Ankle* 14(3):129-135.
- Schonstrom N, Lindahl S, Willen J, et al. (1989) Dynamic changes in the dimension of the lumbar spinal canal: AN experimental study in vitro. *Journal of Orthopedic Research* 7:115-121.
- Shacklock MO (1995) *Clinical Application of Neurodynamics*. In: Shacklock MO (ed.) *Moving in on Pain*, Butterworth-Heinemann, Sydney.
- Simpson RL Et Fern SA (1996) Multiple compression neuropathies and the double-crush syndrome. *Orthopedic Clinics of North America* 27:381-388.
- Slater H, Vincenzino B Et Wright A (1994) "Sympathetic Slump". The effect of a novel manual therapy technique on peripheral sympathetic nervous system function. *The Journal of Manual and Manipulative Therapy* 2:156-162.
- Slater HA Et Wright AW (1995) An investigation of the physiological effects of the sympathetic slump on peripheral sympathetic nervous system function in patients with frozen shoulder. In: Shacklock MO (ed.) *Moving in on Pain*, Butterworth-Heinemann, Sydney.
- Spurling RG Et Scoville WB (1944) Lateral rupture of the cervical intervertebral disc. *Surgery, Gynaecology and Obstetrics* 78:350-358.
- Stitik TP, Nadler SF Et Foye PM (1999) Salon sink radiculopathy. *American Journal of Physical Medicine and Rehabilitation* 78:381-383.
- Sunderland S (1978) *Nerves and Nerve Injuries*, 3rd edn. Churchill Livingstone, Melbourne.
- Travell JG Et Simons DG (1984) *Myofascial pain and dysfunction: the trigger point manual*, Williams Et Wilkins, Baltimore.
- Trepman E, Kadel NJ, Chislolm K, et al. (1999) Effect of foot and ankle position on tarsal tunnel compartment pressure. *Foot and Ankle International* 20:721-726.
- Turl SE Et George KP (1998) Adverse neural tension: a factor in repetitive hamstring strain? *Journal of Orthopedic and Sports Physical Therapy* 27:16-21.
- Upton ARM Et McComas AJ (1973) The double crush in nerve entrapment syndromes. *Lancet* August 18:359-361.
- Viikari-Juntura E, Porras M Et Laasonen E (1989) Validity of clinical tests in the diagnosis of root compression in cervical disc disease. *Spine* 14:253-257.
- Wallengren J Et Klinker M (1995) Successful treatment of notalgia paraesthetica with topical capsaicin, vehicle controlled, double-blind crossover study. *Journal of the American Academy of Dermatology* 32:287-289.
- Wilbourn AJ Et Gilliatt RW (1997) Double-crush syndrome: a critical analysis. *Neurology* 49:21-29.

- Yamamoto S, Ochi M, Shu N, et al. (1988) Expression of cytokines in the dorsal root ganglion cell body in an experimental entrapment neuropathy. *Hand Surgery* 3:175-183.
- YooJU, Zou D, Edwards WT, et al. (1992) Effect of cervical spine motion on the neuroforaminal dimensions of human cervical spine. *Spine* 17:1131-1136.

### **Storia delle microcorrenti a frequenza specifica**

- Cheng, N., 1982. The effect of electric currents on ATP generation, protein synthesis, and membrane transport in rat skin. *Clinical Orthopedics* 171,264-272.
- Electronic reactions of Dr. Abrams. Republished articles from *Electronic Medical Digest* 1980. Borderland Sciences Research Foundation, Vista CA.
- Kandel, E., Schwartz, J., 1985. *Principles of neural science*, second ed. Elsevier, New York, pp. 331-336.
- McMakin, C., 1998. Microcurrent treatment of myofascial pain in the head, neck and face. *Topics in Clinical Chiropractic* 5 (1), 29-35.
- McMakin, C., 2004. Microcurrent therapy: a novel treatment method for chronic low back myofascial pain. *Journal of Bodywork and Movement Therapies* 8,143-153.
- McMakin, C., Gregory, W., Phillips, T., 2005. Cytokine changes with microcurrent treatment of fibromyalgia associated with cervical spine trauma. *Journal of Bodywork and Movement Therapies* 9, 169-176.
- Olmarker, K., Rydevik, B., Nordberg, C., 1993. Autologous nucleus pulposus induces neurophysiologic and histologic changes in porcine cauda equina nerve roots. *Spine* 18, 1425-1432.
- Olmarker, K., Blomquist, j., Stromberg, J., et al., 1995. Inflammatory properties of nucleus pulposus. *Spine* 20:665-669.
- Oschman, J., 2000. *Energy medicine: the scientific basis*. Churchill Livingstone, Edinburgh.
- Ozaktay, A.C., Cavanaugh, J.M., Blagoev, D.C., 1995. Phospholipase A<sub>2</sub>-induced electrophysiologic and histologic changes in rabbit dorsal lumbar spine tissues. *Spine* 20, 2659-2668.
- Ozaktay, A.C., Kallakuri, S., Cavanaugh, J.M., 1998. Phospholipase A<sub>2</sub> sensitivity of the dorsal root ganglion. *Spine* 23, 1297-1306.
- Reilly, W., Reeve, V.E., Quinn, C., 2004. Anti-inflammatory effects of interferential, frequency-specific applied microcurrent. *Proceedings of the Australian Health and Medical Research Congress*.
- Taylor, J.R., Twomey, L.T., 1993. Acute injuries to cervical joints, an autopsy study of neck pain. *Spine* 1115-1122.

### **Fondamenti teorici delle microcorrenti**

- Anderson, M., 2009. Is quantum mechanics controlling your thoughts? Discover Magazine, February 2009.
- Becker, R.O., Seldon, G., 1985. The body electric: electromagnetism and the foundation of life. Quill, William Morrow, New York.
- Becker, R.O., 1990. Cross currents. Jeremy Tarcher/Penguin, New York.
- Cheng, N., et al., 1982. The effect of electric currents on ATP generation, protein synthesis, and membrane transport in rat skin. *Clinical Orthopedics* 171, 264-272.
- Huckfeldt, R., Mikkelsen, D., Larson, K., et al. 2003. The use of micro current and autocatalytic silver plated nylon dressings in human burn patient: a feasibility study. Pacific Rim Burn Conference.
- Kirsch, D.L., Lerner, F.N., 1998. Electromedicine: the order side of physiology. In: Weiner, R.S. (Ed.), Pain Management, a practical guide for clinicians, vol. 2. CRC Press, Boca Raton Florida.
- Lipton, B., 2008. The biology of belief: unleashing the power of consciousness, matter and miracles, second ed. Mountain of Love Productions, Hay House, Inc, Carlsbad, CA.
- Oschman, J., 2000. Energy medicine, the scientific basis. Churchill Livingstone, Edinburgh.
- Oschman, J.L., 2009. Mitochondria and cellular aging. In: Klatz, R., Goldman, R., (Eds.), Anti-aging therapeutics, vol. 11. American Academy of Anti- Aging Medicine, Chicago IL, pp. 185-194.
- Reilly, W., Reeve, V.E., Quinn, C., 2004. Anti-inflammatory effects of interferential, frequency-specific applied microcurrent. Proceedings of the Australian Health and Medical Research Congress.
- Reilly, W., Reeve, V.E., 2005. Private communication- unpublished data from mouse study.
- Szent-Györgyi, A., 1941. Towards a new biochemistry? *Science* 93, 609-611.
- Szent-Györgyi, A., 1988. To see what everyone has seen, to think what no one has thought. *Biol. Bull.* 174, 191-240.

### **Tattamento del dolore neuropatico**

- Bennett, G.A., 2000. Neuroimmune interaction in painful peripheral neuropathy. *Clin. J. Pain* 16, S139-D143.
- Bradley, W.G., Darhoff, R.B., Fenichel, G.M., Marsden, C.D., 2000. Neurology in clinical practice, third ed. Butterwoths Heinemann, Boston.
- Butler, D.S., Gifford, L.S., 1989<sup>a</sup>. The concept of adverse mechanical tension in the nervous system. Part 1: testing for dural tension. *Physiotherapy* 75, 622-629.
- Butler, D.S., Gifford, L.S., 1989<sup>b</sup>. The concept of adverse mechanical tension in the nervous system. Part 2: Examination and treatment *Physiotherapy* 75, 629-636.



- Butler D.S., 1991. Mobilization of the nervous system. Edinburgh, Churchill Livingstone.
- Cloward, R.B., 1959. Cervical discography: mechanisms of neck, shoulder and arm pain. *Ann. Surg.* 150, 1052-1064.
- Hoppenfeld, S., 1976. Physical examination of the spine and extremities. Appleton-Century Crofts, Division of Prentice Hall, New York.
- Huckfeldt, R., Mikkelsen, D., Larson, K., et al., 2003. The use of micro current and autocatalytic silver plated nylon dressings in human burn patients: a feasibility study. Pacific Rim Burn Conference.
- Lewis, C., 2004. Physiotherapy and spinal nerve root adhesion: a caution. *Physiother. Res. Int.* 9, 164-173.
- Meyers, R., Campana, W., Schubayev, F., 2006. The role of neuroinflammation in neuropathic pain: mechanisms and therapeutic targets. *Drug Discov. Today* 11, 8-20.
- McMkin, C., Gregory, W., Phillips, T., 2005. Cytokine changes with microcurrent treatment of fibromyalgia associated with cervical spine trauma. *Journal of Body Work and Movement Therapies* 9, 169-176.
- Marshall, L.L., Trethewie, E.R., Curtain, C.C., 1977. Chemical radiculitis. A clinical, physiological and immunological study. *Clinical Orthopedics* 129, 61-67.
- Netter, F., 1991. Atlas of human anatomy. Ciba-Geigy, Plate 159, New York.
- Olmarker, K., Rydevik, B., Nrodberg, C., 1993. Autologous nucleus pulposus induces neurophysiologic and histologic changes in porcine cauda equina nerve roots. *Spine* 18, 1425-1432.
- Olmarker, K., Blomquist, J., Stromberg, J., et al., 1995. Inflammotogenic properties of nucleus pulposus. *Spine* 20, 665-669.
- Ozaktay, A.C., Cavanaugh, J.M., Blagojev, D.C., 1995. Phospholipase A<sub>2</sub>-induced electrophysiologic and histologic changes in rabbit dorsal lumbar spine tissues. *Spine* 20, 2659-2668.
- Ozaktay, A.C., Kallakuri, S., Cavanaugh, J.M., 1998. Phospholipase A<sub>2</sub> sensitivity of the dorsal root and dorsal ganglion. *Spine* 23, 1297-1306.
- Reilly, W., Reeve, V.E., Quinn, C., 2004. Anti-inflammatory effects of interferential, frequency-specific applied microcurrent. Proceedings of the Australian Health and Medical Research Congress.
- Tal, M., 1999. A role for inflammation in chronic pain. *Curr. Rev. Pain.* 3, 440-446.
- Travell, J.G., Simons, D.G., 1983. Myofascial pain and dysfunction: the trigger point manual. Williams & Wilkins, Baltimore.
- Winquist, R.J., 2005. Use-dependent blockade of Cav 2.2 voltage-gated calcium channels for neuropathic pain. *Biochem. Pharmacol.* 70, 489-499.

- Zieglgansberger, W., Berthele, A., Tolle, T.R., 2005. Understanding neuropathic pain. International Journal of Neuropsychiatric Medicine, CNS Spectrum 10(4), 298-308.

*UN RINGRAZIAMENTO PARTICOLARE A SARA BERGAMO PER  
L'IMPORTANTE LAVORO DI RACCOLTA E DI CATALOGAZIONE DI QUESTO  
DOCUMENTO.*

*Roberto Bergamo*

C.E.O. NERVENIA s.r.l.