

Literaturverzeichnis

- ABE, K. , M. YOSHIDOMI u. K. KOGURE (1989):
Arachidonic acid metabolism in ischemic neuronal damage
Ann N Y Acad Sci. 559, 259-268
- ALBERS, G. W. (1995):
Antithrombotic agents in cerebral Ischemia
American Journal of Cardiology. 75, 34b-38b
- ARONOWSKI, J., R. STRONG u. J. C. GROTTA (1997):
Reperfusion injury: demonstration of brain damage produced by reperfusion after
transient focal ischemia in rats
J Cereb Blood Flow Metab. 17, 1048-1056
- ASHWAL, S., D. J. COLE, T. N. OSBORNE u. W. J. PEARCE (1993):
Low dose of L-NAME reduces infarct volume in the rat MCAO/reperfusion model
J Neurosurg Anesthesiol. 5(4), 241-249
- BAETHMANN, A. , L. SCHÜRER ,A. UNTERBERG, W. WAHL, F. STAUB u. O.
KEMPSKI (1991):
Mediatorssubstanzen des Hirnödems bei der zerebralen Ischämie
Arzneimittelforschung. 41(3a), 310-315
- BARTUS, R. T., R. L. DEAN, K. CAVANAUGH, D. EVELETH, D. L. CARRIERO u.
G. LYNCH (1995):
Time-related neuronal changes following middle cerebral artery occlusion:
Implications for therapeutic intervention and the role of calpain
J Cereb Blood Flow Metab. 15, 969-979
- BECK, T., u. G. W. BIELENBERG (1991):
The effects of two 21-aminosteroids on overt infarct size 48 hours after middle
cerebral artery occlusion in the rat
Brain Res. 560, 159-162
- BECKER, B. F., P. MASSOUDY; B. PERMANETTER, P. RASCHKE u. S. ZAHLER
(1993):
Mögliche Bedeutung von Sauerstoffradikalen für den Reperfusionsschaden
Z Kardiologie. 82(5), 49-58
- BECKMANN, J. S., J. CHEN, H. ISCHIROPOULOS u. K. A. CONGER (1992):
Inhibition of nitric oxide synthesis and cerebral protection
in: J. Krieglstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral
Ischemia 1992.
Wissenschaftliche Verlagsgesellschaft, Stuttgart, 383-394

- BEDERSON, J. B., L. H. PITTS, M. TSUI, M. C. NISHIMURA, R. L. DAVIS u. H. BARTKOWSKI (1986):
Rat Middle Cerebral Artery Occlusion: Evaluation of the Model and Development of a Neurologic Examination
Stroke. 17(3), 472-476
- BELAYEV, L., O. F. ALONSO, R. BUSTO, W. ZHAO u. M. D. GINSBERG (1996):
Middle Cerebral Artery Occlusion in the Rat by Intraluminal Suture
Stroke. 27(9), 1616-1623
- BENTUÉ-FERRER, D., R. DECOMBE, J.-M. REYMANN, C. SCHATZ u. H. ALLAIN (1990):
Progress in understanding the pathophysiology of cerebral ischemia: the almitrine-raubasine approach
Clin Neuropharmacol. 13 Suppl 3, S9-S25
- BOLANDER, H. G., L. PERSSON u. L. HILLERED (1989):
Regional blood flow and histologic changes after middle cerebral artery occlusion
Stroke. 20(7), 930-937
- BOSCHELLI, D. H. (1995):
Inhibitors of leucocyte-endothelial cell adhesion: a new generate of antiinflammatory drugs?
Drugs of the Future. 20(8), 805-816
- BOWES, M. P., R. ROTHLEIN u. J. A. ZIVIN (1993):
Monoclonal Antibody to the ICAM-1 Adhesion Site Reduces Neurological Damage in a Rabbit Cerebral Embolism Stroke Model
Experimental Neurology. 119, 215-219
- BOWES, M., R. ROTHLEIN, S. C. FAGAN u. J. A. ZIVIN (1995):
Monoclonal antibodies preventing leukocyte activation reduce experimental neurologic injury and enhance efficiency of thrombolytic therapy
Neurology. April, 815-819
- BOYSEN, G., u. K. OVERGAARD (1995):
Thrombolysis in ischaemic stroke - how far from a clinical breakthrough ?
Journal of Internal Medicine. 237, 95-103
- BROMONT, C., C. MARIE u. J. BRALET (1989):
Increased lipid peroxidation in vulnerable brain regions after transient forebrain ischemia in rats
Stroke. 20(7), 918-924
- BUCHAN, A. M., S. Z. GERTLER, Z.-G. HUANG, K. E. CHAUNDY u. D. XUE (1994):
Failure to prevent selective CA1 neuronal death and reduce cortical infarction following cerebral ischemia with inhibition of nitric oxide synthase
Neuroscience. 61(1), 1-11

BUEGE, J. A., u. S. D. AUST (1978):
Microsomal lipid peroxidation
Methods Enzymol. 52, 302-310

BUISSON, A., I. MARGAILL, M. ALLIX, J. CALLEBERT, M. PLOTKINE u. R. G. BOULU (1992):
Role of nitric oxide in focal cerebral ischemia
in: J. Krieglstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral Ischemia 1992.
Wissenschaftliche Verlagsgesellschaft, Stuttgart, 417-425

CAI, H., H. YAO, S. IBAYASHI, H. UCHIMURA u. M. FUJISHIMA (1998):
Photothrombotic middle cerebral artery occlusion in Spontaneously hypertensiv rats
Stroke. 29 (9), 1882-1887

CAI, H., H. YAO, S. IBAYASHI, H. UCHIMURA u. M. FUJISHIMA (1998):
Photothrombotic middle cerebral artery occlusion in spontaneously hypertensive rats
Stroke. 29 (9), 1982-1987

CALAPAI, G., F. SQUADRITO, A. RIZZO u. C. CRISAFULLI (1993):
A new antioxidant drug limits brain damage induced by transient cerebral ischemia
Drugs Exptl Clin Res. 19(4), 159-164

CAVALLI-SFORZA, L. (1969):
Biometrie – Grundzüge biologisch-medizinischer Statistik. 2. Aufl.
Gustav Fischer Verlag, Stuttgart

CHAN, P. H., H. KINOUCI, C. J. EPSTEIN, E. CARLSON, S. F. CHEN, S. IMAIZUMI u. G. Y. YANG (1993):
Role of superoxide dismutase in ischemic brain injury: reduction of edema and infarction in transgenic mice following focal cerebral ischemia
Prog Brain Res. 96, 97-104

CHAN, P. H. (1996):
Role of Oxidants in Ischemic Brain Damage
Stroke. 27(8), 1124-1129

CHOI, D. W. (1992):
NMDA receptors, AMPA receptors, and extracellular acidity in ischemic brain damage: A view from the dish
in: J. Krieglstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral Ischemia 1992.
Wissenschaftliche Verlagsgesellschaft, Stuttgart, 45-52

CHOPP, M., R. L. ZHANG, H. CHEN, Y. LI, N. JIANG u. J. R. RUSCHE (1994):
Postischemic Administration of an Anti-Mac-1 Antibody Reduces Ischemic Cell Damage After Transient Middle Cerebral Artery Occlusion in Rats
Stroke. 25(4), 869-876

- CHRISTENSEN, T., T. BRUHN, T. BALCHEN, D. A. SEITZBERG, B. JENSEN, F. JOHANSEN u. N. H. DIEMER (1994):
Detection of hydroxyl radicals in global cerebral ischemia by salicylate trapping and microdialysis
in: J. Krieglstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral Ischemia 1994.
medpharm Scientific Publishers, Stuttgart, 269-276
- CLARK, R. K., E. V. LEE, R. F. WHITE u. T. L. JONAK (1994):
Reperfusion Following Focal Stroke Hastens Inflammation and Resolution of Ischemic Injured Tissue
Brain Res Bull. 35(4), 387-392
- CLEMENS, J. A. , u. J. A. PANETTA (1994):
Neuroprotection by antioxidants in models of global and focal ischemia
Ann NY Acad Sci. 738, 250-256
- COLE, D. J., P. M. PATEL, R. M. SCHELL, J. C. DRUMMOND u. T. N. OSBORNE (1993):
Brain eicosanoid levels during temporal focal cerebral ischemia in rats: a microdialysis study
J Neurosurg Anesthesiol. 5(1), 41-47
- COLE, D., J. DRUMMOND u. P. PATEL (1993):
The effect of thiopental, isoflurane, and etomidate on focal cerebral ischemic injury in rats
J Neurosurg Anesthesiol. 5(4), 285
- CONNOLLY, E. S., C. J. WINTREE, T. A. SPRINGER u. Y. NAKA (1996):
Cerebral Protection in Homozygous Null ICAM-1 Mice after Middle Cerebral Artery Occlusion
J. Clinic. Invest.. 97(1), 209-216
- COTGREAVE, I. A., S. K. DUDDY, G. E. N. KASS, D. THOMPSON u. P. MOLDÉUS (1989):
Studies on the anti-inflammatory activity of ebselen
Biochem Pharmacol. 38(4), 649-656
- DAWSON, D. A. (1994):
Nitric oxide and focal cerebral ischemia: Multiplicity of actions and diverse outcome
Cerebrovasc Brain Metab Rev. 6, 299-324
- DAWSON, D. A. (1995):
The neuroprotective efficiency of ebselen (a glutathione peroxidase mimic) on brain damage induced by transient focal cerebral ischaemia in the rat
Neuroscience Letters. 185, 65-69

- DERYCK, M. (1997):
Protection of neurological function in stroke models and neuroprotective properties of lubeluzole
Cerebrovasc Dis. 7 (suppl 2), 18-30
- DOGAN, A., M. K. BASKAYA, V. L. RAGHAVENDRA RAO, A. MURALIKRISHNA RAO u. R. J. DEMPSEY (1998):
Intraluminal suture occlusion of the middle cerebral artery in Spontaneously Hypertensive rats
Neurol Res. 20, 265-270
- EBERMANN, E. (1996):
Darstellung von Umfang und Verlauf der Folgen temporärer Durchblutungsstörungen im Gehirn der Ratte - Einfluß von Piracetam und Nimodipin auf die postischämischen Veränderungen nach globaler Vorderhirnischämie.
Berlin, Freie Univ., Fachber. Veterinärmed., Diss.
- ERDAHL, W. L., R. L. KREBSBACH u. D. R. PFEIFFER (1991):
A comparison of phospholipid degradation by oxidation and hydrolysis during the mitochondrial permeability transition
Adv Biochem Biophys. 285 (2), 252-260
- ESCAMES, G., J. M. GUERRERO, R. J. REITER, J. J. GARCIA, A. MUNOZ-HOYOZ, G. G. ORTIZ u. C. S. OH (1997):
Melatonin and vitamin E limit nitric oxide-induced lipid peroxidation in rat brain homogenates
Neurosci Letters. 230, 147-150
- FEINBERG, W. M., D. C. BRUCK, M. A. JETER u. J. J. CORRIGAN JR. (1991):
Fibrinolysis after Akute Ischemic Stroke
Thrombosis Research. 64(1), 117-127
- FLOYD, R. A. (1990):
Role of oxygen free radicals in carcinogenesis and brain ischemia
FASEB J. 4(9), 2587-2597
- FOLBERGROVA, J., Y. KIYOTA, K. PAHLMARK, H. MEMEZAWA, M. -L. SMITH u. B. K. SIESJÖ (1993):
Does ischemia with reperfusion lead to oxidative damage to proteins in the brain?
J Cereb Blood Flow Metab. 13, 145-152
- FOX, G., D. GALLACHER, S. SHEVDE u. J. LOFTUS (1993):
Anatomic Variation of the Middle Cerebral Artery in the Sprague-Dawley Rat
Stroke. 24(12), 2087-2093
- FURLAN, A. J., u. G. KANOTI (1997):
When is thrombolysis justified in patients with acute ischemic stroke?
Stroke. 28 (1), 214-218

GALLI, C. , A. PETRONI, A. BERTAZZO u. S. SARTI (1989):
Arachidonic acid and its metabolites during cerebral ischemia and recirculation.
Pharmacological interventions
Ann N Y Acad Sci. 559, 352-364

GARTHWAITE, J. (1992):
Nitric oxide in the brain
in: J. Krieglstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral Ischemia 1992.
Wissenschaftliche Verlagsgesellschaft, Stuttgart, 353-358

GINSBERG, M. D., M. Y.-T. GLOBUS, E. MARTINEZ u. T. MORIMOTO (1994):
Oxygen radical and excitotoxic processes in brain ischemia and trauma
in: J. Krieglstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral Ischemia 1994.
medpharm Scientific Publishers, Stuttgart, 255-268

GOLDMAN, M. S., R. E. ANDERSON u. F. B. MEYER (1992):
Effects of intermittent reperfusion during temporal focal ischemia
J Neurosurg. 77, 911-916

GOWER, J. D., N. J. LANE, J. G. GODDARD, S. MANEK, I. J. AMBROSE u. C. J. GREEN (1994):
Ebselen. Antioxidant capacity in renal preservation
Biochem Pharmacol. 43(11), 2341-2348

GRAU, A. J., E. BERGER, K. L. PAUL SUNG u. G. W. SCHMID-SCHÖNBEIN (1992):
Granulocyte Adhesion, Deformability, and Superoxide Formation in Acute Stroke
Stroke. 23(1), 33-39

GREENBERG, J. H. , D. UEMATSU, N. ARAKI u. M. REIVICH (1991):
Intracellular calcium and pathophysiological changes in cerebral ischemia
Arzneimittelforschung. 41(3a), 324-332

GROND, M. (1997):
Akuttherapie des Schlaganfalls im Wandel?
klinikarzt. 11/26, 302-308

GROND, M. (1997):
Akuttherapie des Schlaganfalls im Wandel?
klinikarzt. 11 (26), 302-308

GROTTA, J. C. (1997):
Treatment of focal ischemia in rats with lubeluzole
Cerebrovasc Dis. 7 (suppl 2), 31-34

- HAKIM, A. M., M. J. HOGAN u. S. CARPENTER (1992):
Time course of cerebral blood flow and histological outcome after focal cerebral ischemia in rats
Stroke. 23 (8), 1138-1144
- HALLIWELL, B., u. M. C. GUTTERIDGE (1989):
Free radicals in biology and medicine. 2. Auflage
Verlag Clarendon Press, Oxford
- HAMANN, G. F. (1997):
Der akute Hirninfarkt: Pathophysiologie und moderne Therapiekonzepte
Radiologe. 37 (11), 843-852
- HANS , P., V. BONHOMME, J. COLETTE u. A. ALBERT (1994):
Propofol protects cultured rat hippocampal neurons against N-methyl-d-aspartats
receptor-mediated glutamate toxicity
J Neurosurg Anesthesiol. 6(4), 249-253
- HEBEL, R., u. M. W. STROMBERG (1976):
Anatomy of the laboratory rat
Verlag The Williams & Wilkins Company, Baltimore
- HEINEL, L. A., S. RUBIN, R. H. ROSENWASSER u. U. S. VASTHARE (1994):
Leucocyte Involvement in Cerebral Infarct Generation After Ischemia and
Reperfusion
Brain Res Bull. 34(2), 137-141
- HEISS, W.-D. (1991):
Akute zerebrale Ischämie: Pathogenese und Therapie
Arzneim.-Forsch.. 41 (1), 282-283
- HEISS, W. D. (1992):
Experimental evidence of ischemic thresholds and functional recovery
Stroke. 23 (11), 1668-1672
- HEISS, W.-D. (1997):
Pathophysiologie des ischämischen Insults
Klinikerzt. 11/26, 288-292
- HELFAER, M. A., J. R. KIRSCH u. R. J. TRAYSTMAN (1994):
Radical scavengers: Penetration into brain following ischemia and reperfusion
in: J. Kriegstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral
Ischemia 1994.
medpharm Scientific Publishers, Stuttgart, 297-309
- HENNERICI, M. G. (1997):
Diagnostik des Schlaganfalls
Klinikerzt. 26 (11), 293-301

HERZ, R.C., M. JONKER, H. B. VERHEUL, B. HILLEN, D. H. VERSTEEG u. D. J. DE WILDT (1996):

Middle cerebral artery occlusion in Wistar and Fischer-344 rats: functional and morphological assesment of the model
J Cereb Blood Flow Metab. 16 (2), 296-302

HESS, D., W. ZHAO, J. CARROLL u. M. MCEACHIN (1994):

Increased Expression of ICAM-1 During Reoxygenation in Brain Endothelial Cells
Stroke. 25(7), 1463-1468

HETLAND, G., G. J. DEL ZOPPO, E. MORI u. W. S. THOMAS (1994):

Uptake of C5a by polymorphonuclear leucocytes (PMNs) after focal cerebral ischemia. I. Effect of tirilazad mesylate intervention on C5a uptake by PMNs
Immunopharmacology. 27, 191-198

HOSHIDA, S., T. KUZUYA, M. NISHIDA, N. YAMASHITA, M. HORI, T. KAMADA u. M. TADA (1994):

Ebselen protects against ischemia-reperfusion injury in a canine model of myocardial infarction
Am J Physiol. 267(6 Pt 2), H2342-H2347

HOSSMANN, K.-A. (1987):

Experimentelle Grundlagen der Ischämietoleranz des Hirns
Z. Kardiol.. 76:(Suppl.4), 47-66

HSU, C. Y. , T.H. LIU, J. XU, E.L. HOGAN, J. CHAO, G. SUN, H. H. TAI, J. S. BECKMAN u. B. A. FREEMAN (1989):

Arachidonic acid and its metabolites in cerebral ischemia
Ann N Y Acad Sci. 559, 282-295

IADECOLA, C. (1997):

Bright and dark side of nitric oxide in ischemic brain injury
Trends Neurosci. 20, 132-139

Institut für Biometrie des FB Veterinärmedizin der FU Berlin, (1986):

Biometrie – Unterlagen für die Pflichtveranstaltung Biometrie am Fachbereich Veterinärmedizin der Freien Universität Berlin. 3. Aufl.
Berlin, Freie Univ., Fachber. Veterinärmed.

ITO, H., M. TORII u. T. SUZUKI (1993):

A comparative study on lipid peroxidation in cerebral cortex of stroke-prone spontaneously hypertensive and normotensive rats
Int J Biochem. 25 (12), 1801-1805

JOSHITA, H., T. ASANO, T. HANAMURA u. K. TAKAKURA (1989):

Effect of Indomethacin and a free radical scavenger on cerebral blood flow and edema after cerebral artery occlusion in cats
Stroke. 20(6), 788-794

- KAPLAN, B., S. BRINT, J. TANABE u. M. JACEWITZ (1991):
Temporal Thresholds for Neocortical Infarction in Rats Subjected to Reversible Focal Cerebral Ischemia
Stroke. 22(8), 1032-1039
- KATSUMATA, T. (1995):
Temporal Thresholds of Reperfusion in the Middle Cerebral Artery Occlusion Model in Rats
Jpn Circ J. 59, 112-120
- KAWAMURA, S., Y. LI, M. SHIRASAWA, N. YASUI u. H. FUKASAWA (1994):
Reversible middle cerebral artery occlusion in rats using an intraluminal thread technique
Surg Neurol. 41(5), 368-373
- KEMPSKI, O. S. (1994):
Neuroprotektion
Anaesthesist. 43 (Suppl2), S25-S33
- KINOTA, Y., H. KIKUCHI, M. ISHIKAWA, M. KIMURA u. Y. ITOKAWA (1989):
Lipid peroxidation in focal cerebral ischemia
J Neurosurg. 71, 421-429
- KLIMM, J., T. BEIN, D. FRÖHLICH u. K. TAEGER (1992):
Stickstoffmonoxid (NO) - physiologische und biochemische Bedeutung
Anästh Intensivmed. 33, 115-123
- KNOLLEMA, S., J. W. ELTING, R. M. DIJKHUIZEN, K. NICOLAY, J. KORF u. G. J. TER HORST (1996):
Ebselen (PZ-51) protects the caudate putamen against hypoxia/ischemia induced neuronal damage
Neurosc Res Comm. 19 (1), 47-56
- KOCHANEK, P. M. (1992):
Polymorphonuclear Leucocytes and Monocytes/Macrophages in the Pathogenesis of Cerebral Ischemia and Stroke
Stroke. 23(9), 1367-1379
- KOIZUMI, J., Y. YOSHIDA, T. NAKAZAWA u. G. OONEDA (1986):
(Experimental studies of ischemic brain edema: 1. A new experimental model of cerebral embolism in rats in which recirculation can be introduced in the ischemic area) (Jap.)
Jpn J Stroke. 8, 1-8
- KONTOS, H. A. (1989):
Oxygen radicals in CNS damage
Chem Biol Interactions. 72, 229-255

KOVÁCH , A. G. B., C. SZABÓ, M. FARAGÓ, I. HORVÁTH, Z. LOHINAI, I. BALLA, Z. BENYÓ, A. OTTLAKÀN, C. CSÀKI, Z. VASS, G. KISS u. M. REIVICH (1992):
Nitric oxide and global cerebral protection
in: J. Kriegstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral Ischemia 1992.

Wissenschaftliche Verlagsgesellschaft, Stuttgart, 395-408

KRIEGLSTEIN, J., U. B. PERUCHE (1991):
Pharmakologische Grundlagen der Therapie der zerebralen Ischämie
Arzneimittelforschung. 41(3a), 303-309

KUGE, Y., K. MINEMATSU, T. YAMAGUCHI, u. Y. MIYAKE (1995):
Nylon monofilament for intraluminal middle cerebral artery occlusion in rats
Stroke. 26(9), 1655-1658

KUMURA, E. (1995):
Effects of superoxide dismutase on nitric oxide production during reperfusion after focal cerebral ischemia
Neuroscience Letters. 200, 137-140

KUSCHINSKY, W. (1991):
Physiology of cerebral blood flow and metabolism
Arzneimittelforschung. 41(3a), 284-288

LAING, R. J. (1993):
Middle Cerebral Artery Occlusion Without Craniectomy in Rats - Which Method Works Best ?
Stroke. 24(2), 294-298

LANCELOT, E. (1995):
Detection of hydroxyl radicals in rat striatum during transient focal cerebral ischemia: possible implication in tissue damage
Neuroscience Letters. 197, 85-88

LEFER, A. M. (1994):
Role of selectins, a new family of adhesion molecules, in ischaemia-reperfusion injury
Cardiovasc Res. 28, 289-294

LUCCHESI, B. R. (1993):
Complement Activation, Neutrophils, and Oxygen Radicals in Reperfusion Injury
Stroke. 24(12, Suppl I), I 41-I 47

MACRAE, M. (1992):
New Models of Focal Cerebral Ischemia
Br J Clin Pharmacol. 34(4), 302-308

- MARTZ, D. (1989):
Allopurinol and Dimethylthiourea Reduce Brain Infarction Following Middle Cerebral Artery Occlusion in Rats
Stroke. 20(4), 488-494
- MARUKI, Y., R. C. KOEHLER, J. R. KIRSCH u. R. J. TRAYSTMAN (1992):
Efficiency of the 21-aminosteroid tirilazad during normoglycemic and hyperglycemic ischemia on early metabolic and evoked potential recovery
in: J. Krieglstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral Ischemia 1992.
Wissenschaftliche Verlagsgesellschaft, Stuttgart, 333-337
- MATSUI, T., H. JOHSITA, T. ASANO u. J. TANAKA (1990):
Effect of a free radical scavenger, ebselen, on cerebral ischemia
in: J. Krieglstein u. H. Oberpichler (Hrsg.): Pharmacology of Cerebral Ischemia 1990.
Wissenschaftliche Verlagsgesellschaft, Stuttgart, 363-367
- MATSUO, Y. (1994):
Role of cell adhesion molecules in brain injury after transient middle cerebral artery occlusion in the rat
Brain Res. 656, 344-352
- MATSUO, Y. (1995):
Role of Neutrophils in Radical Producing During Ischemia and Reperfusion of the Rat Brain: Effect of Neutrophil Depletion on Extracellular Ascorbyl Radical Formation
J Cereb Blood Flow Metab. 15(6), 941-947
- MCAULEY, M. A. (1995):
Rodent Models of Focal Ischemia
Cerebrovasc Brain Metab Rev. 7(2), 153-180
- MELDRUM, B. S. (1995):
Cytoprotective therapies in stroke
Curr Opin Neurol. 8(1), 15-23
- MEMEZAWA, H. (1992a):
Ischemic penumbra in a model of reversible middle cerebral artery occlusion in the rat
Exp Brain Res. 89, 67-78
- MEMEZAWA, H., M.-L. SMITH u. B. K. SIESJÖ (1992b):
Penumbral tissue salvaged by reperfusion following middle cerebral artery occlusion in rats
Stroke. 23(4), 552-559
- MILLIKAN, C. (1992):
Animal Stroke Models
Stroke. 23(6), 795-797

- MIZUI, T. (1992):
Depletion of brain glutathione by buthionine sulfoximine enhances cerebral ischemic injury in rats
Am J Physiol. 262, H313-H317
- MOHR, J. P. (1992):
Calcium antagonists in acute ischemic stroke
in: J. Krieglstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral Ischemia 1992.
Wissenschaftliche Verlagsgesellschaft, Stuttgart, 553-558
- MORIKAWA, E. (1996):
Treatment of Focal Cerebral Ischemia With Synthetic Oligopeptide Corresponding to Lectin Domain of Selectin
Stroke. 27(5), 951-956
- MULLER, W. A. (1995):
Migration of Leucocytes Across the Vascular Intima
Trends Cardiovasc Med. 5(1), 15-20
- MÜLLER, A., E. CADENAS, P. GRAF u. H. SIES (1984):
A novel biologically active seleno-organic compound - I
Biochem Pharmacol. 33(20), 3235-3239
- MYSEROS, J. S. , u. R. BULLOCK (1995):
The rationale for glutamate antagonists in the treatment of traumatic brain injury
Ann N Y Acad Sci. 765, 262-271
- NAGASAWA, H. (1989):
Correlation Between Cerebral Blood Flow and Histologic Changes in a New Model of Middle Cerebral Artery Occlusion
Stroke. 20(8), 1037-1043
- NAKAGAWA, Y., N. FUJIMOTO, K. MATSUMOTO u. J. CERVÓS-NAVARRO (1990):
Morphological changes in acute cerebral ischemia after occlusion and reperfusion in the rat
Adv Neurol. 52, 21-27
- NELSON, C. W., E. P. WEI, J. T. POVLISHOCK, H. A. KONTOS u. M. A. MOSKOWITZ (1992):
Oxygen radicals in cerebral ischemia
Am J Physiol. 263, H1356-H1362
- NOGUCHI, N., Y. YOSHIDA, H. KANEDA, Y. YAMAMOTO u. E. NIKI (1992):
Action of ebselen as an antioxidant against lipid peroxidation
Biochem Pharmacol. 44(1), 39-44

- OBRENOVITCH, T. P. (1995 a):
The Ischaemic Penumbra: Twenty Years On
Cerebrovasc Brain Metab Rev. 7(4), 297-323
- OBRENOVITCH, T. P., u. D. A. RICHARDS (1995 b):
Extracellular Neurotransmitter Changes in Cerebral Ischemia
Cerebrovasc Brain Metab Rev. 7(1), 1-54
- OGAWA, A., T. YOSHIMOTO, H. KIKUCHI, K. SANO, I. SAITO, T. YAMAGUCHI u.
H. YASUHARA (1999):
Ebselen in acute middle cerebral artery occlusion: a placebo-controlled, double-blind
clinical trial
Cerebrovasc Dis. 9, 112-118
- OLDS, R. J., u. J. R. OLDS (1984):
Farbatlas der Anatomie der Ratte.
Schober Verlags-GmbH, Hengersberg. ,
- OLIFF, H. S., P. COYLE u. E. WEBER (1997):
Rat strain differences in collateral anastomoses
J Cereb Blood Flow Metab. 17, 571-576
- OLIVER, C. N., P. E. STARKE-REED, E. R. STADTMAN, G. J. LIU, J. M. CARNEY
u. R. A. FLOYD (1990):
Oxidative damage to brain proteins, loss of glutamine synthetase activity, and
production of free radicals during ischemia/reperfusion-induced injury to gerbil brain
Proc Natl Acad Sci USA. 87, 5144-5147
- OVERGAARD, K. (1994):
Thrombolytic Therapy in Experimental Embolic Stroke
Cerebrovasc Brain Metab Rev. 6(3), 257-287
- PANETTA, T. , V. L. MARCHESELLI, P. BRAQUET u. N. G. BAZAN (1989):
Arachidonic acid metabolism and cerebral blood flow in the normal, ischemic, and
reperfused gerbil brain
Ann N Y Acad Sci. 559, 340-351
- PARNHAM, M. J., u. S. KINDT (1984):
A novel biologically active seleno-organic compound - III
Biochem Pharmacol. 20, 3247-3250
- PELLIGRINO, D. A. (1993):
Saying NO to cerebral ischemia
J Neurosurg Anesthesiol. 5(4), 221-231

- PERUCHE, B., u. J. KRIEGLSTEIN (1993):
Mechanisms of drug actions against neuronal damage caused by ischemia - an overview
Prog Neuropsychopharmacol Biol Psychiatry. 17, 21-70
- PETERS, O., T. BACK, U. LINDAUER, C. BUSCH, J. DREIER u. DIRNAGEL (1998):
Increased formation of reactive oxygen species after permanent and reversible middle cerebral artery occlusion in the rat
J Cereb Blood Flow Metab. 18 (2), 196-205
- PIANTADOSI, C. A., u. J. ZHANG (1996):
Mitochondrial generation of reactive oxygen species after brain ischemia in the rat
Stroke . 27(2), 327-332
- PLACER, Z. A. , L. L. CUSHMAN u. B. C. JOHNSON (1966):
Estimation of product of lipid peroxidation (malonyl dialdehyde) in biochemical systems
Anal Biochem. 16, 359-364
- PRADO, R. (1993):
Effects of Nitric Oxide Synthase Inhibition on Cerebral Blood Flow Following Bilateral Carotid Artery Occlusion and Recirculation in the Rat
J Cereb Blood Flow Metab. 13(4), 720-723
- PROCTER, A. W. (1990):
Can we reverse ischemic penumbra? Some mechanisms in the pathophysiology of energy-compromised brain tissue
Clin Neuropharmacol. 13 Suppl 3, S34-S39
- PULSINELLI, W. A. , J. B. BRIERLEY u. F. PLUM (1982):
Temporal profile of neuronal damage in a model of transient forebrain ischemia
Ann Neurol. 11, 491-98
- RAMAKRISHNAN, N., J. F. KALINICH u. D. E. MCCLAIN (1996):
Ebselen inhibition of apoptosis by reduction of peroxides
Biochem Pharmacol. 51, 1443-1451
- RAMI, A., u. J. KRIEGLSTEIN (1992):
Inhibition of proteolysis prevents neuronal damage caused by cytotoxic hypoxia or ischemia
in: J. Krieglstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral Ischemia 1992.
Wissenschaftliche Verlagsgesellschaft, Stuttgart, 301-307
- RAPOPORT, S. I., W. R. FREDERICKS, K. OHNO u. K. D. PETTIGREW (1980):
Quantitative aspects of reversible osmotic opening of the blood-brain barrier
Am J Physiol. 238, R421-R431

REITER, R. J. (1994):

The neurohormone melatonin: Its role in antioxidant protection with special reference to the brain

in: J. Krieglstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral Ischemia 1994.

medpharm Scientific Publishers, Stuttgart, 287-296

RIDENOUR, T. R. (1992):

Comparative effects of Propofol and Halothane on outcome from temporary middle cerebral artery occlusion in the rat

Anesthesiology. 76, 807-812

RINGELSTEIN, E. B. (1994):

Lazaroide

Sonderdruck aus D. Moskopp und H. Wassmann Zerebroprotektive Massnahmen bei Energiekrisen des Gehirns

Biermann Verlag, Zülpich, FRG, 140-149

ROGERS, D. C., C. A. CAMPBELL, J. L. STRETTON u. K. B. MACKAY (1997):

Correlation between motor impairment and infarct volume after permanent and transient middle cerebral artery occlusion in the rat

Stroke. 28 (10), 2060-2066

RÖSSLER, K., C. NEUCHRIST, K. KITZ, O. SCHEINER, D. KRAFT u. H. LASSMANN (1992):

Expression of Leucocyte Adhesion Molecules at the Human Blood-Brain Barrier (BBB)

J. Neurosc Res.. 31, 365-374

SACHS, L. (1997):

Angewandte Statistik. 8. Auflage

Springer-Verlag, Berlin

SACHS, L. (1979):

Statistische Methoden. 4. Auflage

Springer-Verlag, Berlin

SAKAMOTO, A., S. T. ONISHI, T. ONISHI u. R. OGAWA (1991):

Relationship between free radical production and lipid peroxidation during ischemia-reperfusion injury in the rat brain

Brain Res. 554, 186-192

SAUTER, A., u. M. RUDIN (1995):

Strain-dependent drug effects in rat middle cerebral artery occlusion model of stroke

J Pharm Exp Therap. 274 (2), 1008-1013

SCHEINBERG, P. (1991):
The biologic basis for the treatment of acute stroke
Neurology. 41, 1867-1873

SCHEWE, T. (1995):
Molecular actions of ebselen - an antiinflammatory antioxidant
Gen Pharmacol. 26(6), 1153-1169

SCHMID-ELSAESSER, R., S. ZAUSINGER, E. HUNGERHUBER, A. BAETHMANN
u. H.-J. REULEN (1998):
A critical reevaluation of the intraluminal thread model of focal cerebral ischemia
Stroke. 29 (10), 2162-2170

SCHROETER, M. (1994):
Local immune response in the rat cortex after middle cerebral artery occlusion
J Neuroimmunol. 55, 195-203

SEWERYNEK, E., B. POEGGLER, D. MELCHIORRI u. R. J. REITER (1995):
H₂O₂-induced lipid peroxidation in rat brain homogenates is greatly reduced by
melatonin
Neurosci Letters. 195, 203-205

SHIGA, Y. (1991):
Neutrophil as a Mediator of Ischemic Edema Formation in the Brain
Neuroscience Letters. 125, 110-112

SHIMIZU, S., R. P. SIMON u. S. H. GRAHAM (1997):
Dimethylsulfoxide (DMSO) treatment reduces infarction volume after permanent
focal cerebral ischemia in rats
Neuroscience Letters. 239, 125-127

SIES, H. (1994):
Ebselen
Methods in Enzymology. Vol 234, 476-482

SIES, H. (1995):
Ebselen
Methods in Enzymology. Vol 252, 341-342

SIESJÖ, B. K., u. M.-L. SMITH (1991):
The biochemical basis of ischemic brain lesions
Arzneimittelforschung. 41(3a), 288-292

SIESJÖ, B. K. (1992a):
Pathophysiology and treatment of focal cerebral ischemia. Part I: Pathophysiology
J Neurosurg. 77, 169-184

SIESJÖ, B. K. (1992b):

Pathophysiology and treatment of focal cerebral ischemia. Part II: Mechanism of damage and treatment

J Neurosurg. 77, 337-354

SIESJÖ, B. K., K. KATSURA, K. PAHLMARK u. M.-L. SMITH (1992c):

The multiple causes of ischemic brain damage: a speculative synthesis

in: J. Krieglstein u. H. Oberpichler-Schwenk (Hrsg.): Pharmacology of Cerebral Ischemia 1992.

Wissenschaftliche Verlagsgesellschaft, Stuttgart, 511-525

SIESJÖ, B. K. (1993):

A new perspective on ischemic brain damage?

Prog Brain Res. 96, 1-9

SIMS, N. R., u. E. ZAIDAN (1995):

Biochemical changes associated with selective neuronal death following short-term cerebral ischemia

Int J Biochem Cell Biol. 27(6), 531-550

SLIVKA, A., E. MURPHY u. L. HORROCKS (1995):

Cerebral edema after temporary and permanent middle cerebral artery occlusion in the rat

Stroke. 26 (6), 1061-1066

STIPEK, S., F. STASTNY, J. PLATENIK, J. CRKOVSKA u. T. ZIMA (1997):

The effect of quinolinate on rat brain lipid peroxidation

Neurochem Int. 30 (2), 233-237

SUN, D., u. D. D. GILBOE (1994):

Ischemia-induced changes in cerebral mitochondrial free fatty acids, phospholipids, and respiration in the rat

J Neurochem. 62, 1921-1928

SWANSON, R. A. (1990):

A Semiautomated Method for Measuring Brain Infarct Volume

J Cereb Blood Flow Metab. 10(2), 290-293

TAKASAGO, T., E. E. PETERS, D. I. GRAHAM, H. MASAYASU u. I. M. MACRAE (1997):

Neuroprotective efficacy of ebselen, an anti-oxidant with anti-inflammatory actions, in a rodent model of permanent middle cerebral artery occlusion

Br J Pharmacol. 122, 1251-1256

- TAMURA, A., D.I. GRAHAM, J. MCCULLOCH u. G. M. TEASDALE (1981):
Focal cerebral ischaemia in the rat: 1. Description of technique and early neuropathological consequences following middle cerebral artery occlusion.
J Cereb Blood Flow Metab . 1(1), 53-60
- TRAYSTMAN, R. J., J. R. KIRSCH u. R. C. KOEHLER (1991):
Oxygen radical mechanisms of brain injury following ischemia and reperfusion
J Appl Physiol . 71(4), 1185-1195
- TSUCHIDATE, R., Q.-P. HE, M.-L. SMITH u. B. K. SIESJÖ (1997):
Regional cerebral blood flow during and after 2 hours of middle cerebral artery occlusion in the rat
J Cereb Blood Flow Metab. 17, 1066-1071
- ULLRICH, V., P. WEBER, F. MEISCH u. F. VON APPEN F (1996):
Ebselen-binding equilibria between plasma and target proteins
Biochem Pharmacol. 52, 15-19
- VAGNOZZI , R., B. TAVAZZI, G. LAZZARINO, D. DI PIERRO, P. SIRAGUSA, R. GIUFFRÉ u. B. GIARDINA (1994):
Time dependence of plasma malondialdehyde, oxypurines, and nucleosides during incomplete cerebral ischemia in the rat
Biochem Med Metab Biol. 53, 98-104
- VALENZUELA, A. (1991):
The biological significance of malondialdehyde determination in the assessment of tissue oxidative stress
Life Sci. 48 (4), 301-309
- VILLALOBOS, M. A., J. P. DE LA CRUZ, T. CARRASCO u. J. M. SMITH-AGREDA (1994):
Effects of α -tocopherol on lipid peroxidation and mitochondrial reduction of tetraphenyl tetrazolium in the rat brain
Brain Res Bull. 33 (3), 313-318
- VON KUMMER, R. (1993):
Thrombolyse bei akuter zerebraler Ischämie
Akt Radiol. 3, 351-355
- WAGNER, G., G. SCHUCH, T. P. AKERBOOM u. H. SIES (1994):
Transport of ebselen in plasma and its transfer to binding sites in the hepatocyte
Biochem Pharmacol. 48(6), 1137-1144
- WAHL, F., M. ALLIX, M. PLOTKINE u. R. G. BOULU (1992):
Neurological and behavioral outcome of focal cerebral ischemia in rats
Stroke. 23 (2), 267-272

- WANG, P.-Y. (1993):
Leucocyte Infiltration in Acute Hemispheric Ischemic Stroke
Stroke. 24(2), 236-240
- WANG, L. C. (1995):
A Reproducible Model of Middle Cerebral Infarcts, Compatible with Long-term Survival in Aged Rats
Stroke. 26(11), 2087-2090
- WARDLAW, J. M., C. P. WARLOW u. C. COUNSELL (1997):
Systematic review of evidence on thrombolytic therapy for acute ischemic stroke
Lancet. 350, 607-614
- WARNER, D. S. (1991):
Reversible Focal Ischemia in the Rat: Effects of Halothane, Isoflurane, and Methohexital Anesthesia
J Cereb Blood Flow Metab. 11, 794-802
- WATSON, B. D. , u. M. D. GINSBERG (1989):
Ischemic injury in the brain. Role of oxygen radical-mediated processes
Ann N Y Acad Sci. 559, 269-281
- WATSON , B. D. (1993):
Evaluation of the concomitance of lipid peroxidation in experimental models of cerebral ischemia and stroke
Prog Brain Res. 96, 69-95
- XUE, D. (1992):
Tirilazad Reduces Cortical Infarction After Transient but Not Permanent Focal Cerebral Ischemia in Rats
Stroke. 23(6), 894-899
- YAMAGUCHI, T., K. SANO, K. TAKAKURA, I. SAITO, Y. SHINOHARA, T. ASANO u. H. HASUHARA (1998):
Ebselen in acute ischemic stroke: a placebo-controlled, double-blind clinical trial. Ebselen study group
Stroke. 29(1), 12-17
- YAMAMOTO, M., K. TAKAHASHI, M. OHYAMA, T. YAMAGUCHI, S. SAITOH, S. YATSUGI u. K. KOGURE (1993):
Behavioral and histological changes after repeated brief cerebral ischemia by carotid artery occlusion in gerbils
Brain Res. 608, 16-20
- YAMASAKI, Y. (1995):
Transient Increase of Cytokine-Induced Neutrophil Chemoattractant, a Member of the Interleukin-8 Family, in Ischemic Brain Areas After Focal Ischemia in Rats
Stroke. 26(2), 318-323

- YAMASAKI, Y. (1995):
Interleukin-1 as a Pathogenetic Mediator of Ischemic Brain Damage in Rats
Stroke. 26(4), 676-681
- YOSHIDA, S. (1989):
Brain injury after ischemia and trauma. The role of vitamin E
Ann N Y Acad Sci. 570, 219-236
- ZAROW, G. J., H. KARIBE, B. A. STATES, S. H. GRAHAM u. P. R. WEINSTEIN (1997):
Endovascular suture occlusion of the middle cerebral artery in rats: effect of suture insertion on cerebral blood flow, infarct distribution and infarct volume
Neurol Res. 19 (4), 409-416
- ZEA LONGA, E., P. R. WEINSTEIN, S. CARLSON u. R. CUMMINS (1989):
Reversible Middle Cerebral Artery Occlusion Without Craniectomy in Rats
Stroke. 20(1), 84-91
- ZHANG, R. L. (1994):
Anti-ICAM-1 Antibody Reduces Ischemic Cell Damage After Transient Middle Cerebral Artery Occlusion in the Rat
Neurology. 44, 1747-1751
- ZHANG, Z. G. (1995):
Postischemic Treatment (2-4h) with Anti-CD11b and Anti-CD18 Monoclonal Antibodies are Neuroprotective After Transient (2h) Focal Cerebral Ischemia in the Rat
Brain Res. 698, 79-85
- ZHANG, R. L. (1995):
Anti-Intercellular Adhesion Molecule-1 Antibody Reduces Ischemic Cell Damage After Transient But Not Permanent Middle Cerebral Artery Occlusion in the Wistar Rat
Stroke. 26(8), 1438-1443
- ZHANG, R. L. (1996):
Synthetic peptide derived from the Bordetella pertussis bacterium reduces infarct volume after transient middle cerebral artery occlusion in the rat
Neurology. 46, 1437-1441
- ZHU, Z. Z., u. R. N. ÅUER (1995):
Graded hypotension and MCA occlusion duration: Effect of transient focal ischemia
J Cereb Blood Flow Metab. 15, 980-988
- ZIVIN, J. A. (1991):
Neue Ansätze zur Schlaganfall-Therapie
Spektrum der Wissenschaft. September, 58-66