

6. Literaturverzeichnis

- Amann K, Gross ML, Ritz E. Pathophysiology underlying accelerated atherogenesis in renal disease: Closing in on the target. *J Am Soc Nephrol.* 2004;15:1664-1666.
- Anavekar NS, McMurray JJ, Velazquez EJ, Solomon SD, Kober L, Rouleau JL, White HD, Nordlander R, Maggioni A, Dickstein K, Zelenkofske S, Leimberger JD, Califf RM, Pfeffer MA. Relation between renal dysfunction and cardiovascular outcomes after myocardial infarction. *N Engl J Med.* 2004;351:1285-1295.
- Annuk M, Lind L, Linde T, Fellstrom B. Impaired endothelium-dependent vasodilation in renal failure in humans. *Nephrol Dial Transplant.* 2001;16:302–306.
- Annuk M, Zilmer M, Fellström B. Endothelium-dependent vasodilation and oxidative stress in chronic renal failure. Impact on cardiovascular disease. *Kidney Int.* 2003;63(Suppl 84):S50-S53.
- Annuk M, Zilmer M, Lind L, Linde T, Fellstrom B. Oxidative stress and endothelial function in chronic renal failure. *J Am Soc Nephrol.* 2001;12:2747-2752.
- Bachmann J, Tepel M, Raidt H, Riezler R, Graefe U, Langer K, Zidek W. Hyperhomocysteinemia and the risk for vascular disease in hemodialysis patients. *J Am Soc Nephrol.* 1995;6:121-125.
- Baigent C, Burbury K, Wheeler D. Premature cardiovascular disease in chronic renal failure. *Lancet.* 2000;356:147-152.
- Becker BN, Himmelfarb J, Henrich WL, Hakim RM. Reassessing the cardiac risk profile in chronic hemodialysis patients: a hypothesis on the role of oxidant stress and other non-traditional cardiac risk factors. *J Am Soc Nephrol.* 1997;8:475-486.
- Bhagat K, Vallance P. Inflammatory cytokines impair endothelium-dependent dilatation in human veins in vivo. *Circulation.* 1997;96:3042–3047.
- Bianchi G. Hypertension in chronic renal failure and end-stage renal disease patients treated with haemodialysis or peritoneal dialysis. *Nephrol Dial Transplant.* 2000;15:105-110.
- Blake GJ, Ridker PM. Novel clinical markers of vascular wall inflammation. *Circ Res.* 2001;89:763-771.
- Blacher J, Guerin AP, Pannier B, Marchais SJ, London GM. Aortic pulse wave velocity index and mortality in end-stage renal disease. *Kidney Int.* 2003;63:1852-1860.

- Block GA, Hulbert-Shearon TE, Levin NW, Port FK. Association of serum phosphorus and calcium x phosphate product with mortality risk in chronic hemodialysis patients: a national study. *Am J Kidney Dis.* 1998;31:607-617.
- Boaz M, Smetana S, Weinstein T, Matas Z, Gafter U, Iaina A, Knecht A, Weissgarten Y, Brunner D, Fainaru M, Green MS. Secondary prevention with antioxidants of cardiovascular disease in endstage renal disease (SPACE): randomised placebo-controlled trial. *Lancet.* 2000;356:1213-1218.
- Busse R, Luckhoff A, Bassenge E. Endothelium-derived relaxant factor inhibits platelet activation. *Naunyn Schmiedebergs Arch Pharmacol.* 1987;336(5):5666-571.
- Cavalcanti S, Ciandrini A, Severi S, Badiali F, Bini S, Gattiani A, Cagnoli L, Santoro A. Model-based study of the effects of the hemodialysis technique on the compensatory response to hypovolemia. *Kidney Int.* 2004;65:1499-1510.
- Chakraborti S, Chakraborti T. Oxidant-mediated activation of mitogen-activated protein kinases and nuclear transcription factors in the cardiovascular system: a brief overview. *Cell Signal.* 1998;10:675-683.
- Charra B, Calevard M, Laurent G. Importance of treatment time and blood pressure control in achieving long-term survival on dialysis. *Am J Nephrol.* 1996;16:35-44.
- Cooke JP, Rossitch E Jr, Andon NA, Loscalzo J, Dzau VJ. Flow activates an endothelial potassium channel to release an endogenous nitrovasodilator. *J Clin Invest.* 1991;88:1663-1671.
- Corretti MC, Anderson TJ, Benjamin EJ, Celermajer D, Charbonneau F, Creager MA, Deanfield J, Drexler H, Gerhard-Herman M, Herrington D, Vallance P, Vita J, Vogel R; International Brachial Artery Reactivity Task Force. Guidelines for the ultrasound assessment of endothelial-dependent flow-mediated vasodilation of the brachial artery: a report of the International Brachial Artery Reactivity Task Force. *J Am Coll Cardiol.* 2002;39:257-265.
- Daugirdas JT. Pathophysiology of dialysis hypotension: an update. *Am J Kidney Dis.* 2001;38 (4 Suppl 4):S11-17.?
- Daugirdas JT. Second generation logarithmic estimates of single-pool variable volume Kt/V:an analysis of error. *J Am Soc Nephrol.* 1993;4(5):1205-1213..
- Donauer J. Hemodialysis-induced hypotension: impact of technologic advances. *Semin Dial.* 2004;17:333-335.
- Endemann DH, Schiffrin EL. Endothelial dysfunction. *J Am Soc Nephrol.* 2004;15:1983-1992.

- Frei U, Schober-Halstenberg HJ. Nierenersatztherapie in Deutschland. *QuaSi-Niere Jahresbericht 2004/2005*, Berlin, Deutschland.
- Foley RN, Parfrey PS, Sarnak MJ. Epidemiology of cardiovascular disease in chronic renal disease. *J Am Soc Nephrol*. 1998;9(12 Suppl):S16-S29
- Furchtgott RF, Zawadzki JV. The obligatory role of endothelial cells in the relaxation of arterial smooth muscle by acetylcholine. *Nature* 1980;288:373-376.
- Gibbons GH, Dzau VJ: Mechanisms of Disease: The Emerging Concept of Vascular Remodeling. *N Engl J Med*. 1994;330:1431-1438.
- Goldmann JM, Petterson MT, Kopotic RJ, Barker SJ. Masimo signal extraction pulse oximetry. *J Clin Monit Comput* 2000; 16:475-483.
- Goldwasser P, Mittman N, Antignani A, Burrell D, Michel MA, Collier J, Avram MM. Predictors of mortality in hemodialysis patients. *J Am Soc Nephrol*. 1993;3:1613-1622.
- Goodman WG, Goldin J, Kuizon BD, Yoon C, Gales B, Sider D, Wang Y, Chung J, Emerick A, Greaser L, Elashoff RM, Salusky IB. Coronary-artery calcification in young adults with end-stage renal disease who are undergoing dialysis. *N Engl J Med*. 2000;342:1478-1483.
- Griendling KK, Sorescu D, Lassegue B, Ushio-Fukai M. Modulation of protein kinase activity and gene expression by reactive oxygen species and their role in vascular physiology and pathophysiology. *Arterioscler Thromb Vasc Biol*. 2000;20:2175-2183.
- Griffith TM, Edwards DH, Lewis MJ, Henderson AH. Evidence that cyclic guanosine monophosphate (cGMP) mediates endothelium-dependent relaxation. *Eur J Pharmacol*. 1985;112(2) :195-202.
- Hakim RM, Held PJ, Stannard DC, Wolfe RA, Port FK, Daugirdas JT, Agodoa L. Effect of the dialysis membrane on mortality of chronic haemodialysis patients. *Kidney Int*. 1996;50(2):566-570.
- Hand MF, Haynes WG, Webb DJ. Haemodialysis and L-Arginine, but not D-arginine, correct renal failure-associated endothel dysfunction. *Kidney Int*. 1998;53:1068-1077.
- Harrison DG. Cellular and molecular mechanisms of endothelial cell dysfunction. *J Clin Invest*. 1997;100:2153-2157.
- Herzog CA, Ma JZ, Collins AJ. Poor long-term survival after acute myocardial infarction among patients on long-term dialysis. *N Engl J Med*. 1998;339:799-805.

- Himmelfarb J, Hakim RM. Oxidative stress in uremia. *Curr Opin Nephrol Hypertens.* 2003;12:593-598.
- Hoffmann U, Fischereder M, Marx M, Schweda F, Lang B, Straub RH, Kramer BK. Induction of cytokines and adhesion molecules in stable hemodialysis patients: is there an effect of membrane material? *Am J Nephrol.* 2003;23:442-447.
- Iseki K, Kawazoe N, Fukiyama K. Serum albumin is a strong predictor of death in chronic dialysis patients. *Kidney Int.* 1993;44:115-119.
- Iseki K, Miyasato F, Tokuyama K, Nishime K, Uehara H, Shiohira Y, Sunagawa H, Yoshihara K, Yoshi S, Toma S, Kowatari T, Wake T, Oura T, Fukiyama K. Low diastolic blood pressure, hypoalbuminemia, and risk of death in a cohort of chronic hemodialysis patients. *Kidney Int.* 1997;51:1212-1217.
- Joannides R, Bakkali EH, Le Roy F, Rivault O, Godin M, Moore N, Fillastre JP, Thuillez C. Altered flow-dependent vasodilation of conduit arteries in maintenance haemodialysis. *Nephrol Dial Transplant.* 1997;12:2623-2628.
- Joannides R, Haefeli WE, Linder L, Richard V, Bakkali EH, Thuillez C, Luscher TF. Nitric oxide is responsible for flow-dependent dilatation of human peripheral conduit arteries in vivo. *Circulation.* 1995;91:1314-1349.
- Kalantar-Zadeh K, Block G, Humphreys MH, McAllister CJ, Kopple JD. A low, rather than a high, total plasma homocysteine is an indicator of poor outcome in hemodialysis patients. *J Am Soc Nephrol.* 2004a;15:442-453.
- Kalantar-Zadeh K, McAllister CJ, Lehn RS, Liu E, Kopple JD. A low serum iron level is a predictor of poor outcome in hemodialysis patients. *Am J Kidney Dis.* 2004b;43:671-684.
- Kalousova M, Sulkova S, Fialova L, Soukupova J, Malbohan IM, Spacek P, Braun M, Mikulikova L, Fortova M, Horejsi M, Tesar V, Zima T. Glycoxidation and inflammation in chronic haemodialysis patients. *Nephrol Dial Transplant.* 2003;18:2577-2581.
- Kamata H, Hirata H. Redox regulation of cellular signalling. *Cell Signal.* 1999;11:1-14.
- Kao YH, Mohler ER, Arger PH, Sehgal CM. Brachial artery: measurement of flow-mediated dilatation with cross-sectional US-technical validation. *Radiology* 2003;228:895-900.
- Klassen PS, Lowrie EG, Reddan DN, DeLong ER, Coladonato JA, Szczech LA, Lazarus JM, Owen WF Jr. Association between pulse pressure and mortality in patients undergoing maintenance hemodialysis. *JAMA.* 2002;287:1548-1555.

- Kosch M, Levers A, Fobker M, Barenbrock M, Schaefer RM, Rahn KH, Hausberg M. Dialysis filter type determines the acute effect of haemodialysis on endothelial function and oxidative stress. *Nephrol Dial Transplant.* 2003;18:1370-1375.
- Lassegue B, Sorescu D, Szocs K, Yin Q, Akers M, Zhang Y, Grant SL, Lambeth JD, Griendling KK. Novel gp91(phox) homologues in vascular smooth muscle cells: nox1 mediates angiotensin II-induced superoxide formation and redox-sensitive signaling pathways. *Circ Res.* 2001;88:888-894.
- Lazarus JM, Owen WF. Role of biocompatibility in dialysis morbidity and mortality. *Am J Kidney Dis.* 1994;24:1019-1032
- Locatelli F, Aljama P, Barany P, Canaud B, Carrera F, Eckardt KU, Horl WH, Macdougal IC, Macleod A, Wiecek A, Cameron S; European Best Practice Guidelines Working Group. Revised European best practice guidelines for the management of anaemia in patients with chronic renal failure. *Nephrol Dial Transplant.* 2004;19:1-47.
- Locatelli F, Marcelli D, Conte F, D'Amico M, DelVecchio L, Limido A, Malberti F, Spotti D. Cardiovascular disease in chronic renal failure: the challenge continues. Registro Lombardo Dialisi e Trapianto. *Nephrol Dial Transplant.* 2000;15:69-80.
- London GM, Blacher J, Pannier B, Guerin AP, Marchais SJ, Safar ME. Arterial wave reflections and survival in end-stage renal failure. *Hypertension.* 2001;38:434-438.
- London GM, Marchais SJ, Guerin AP, et al. Arterial structure and function in end-stage renal disease. *Nephrol Dial Transplant.* 2002; 17:1713-1724.
- Mallick NP, Gokal R. Haemodialysis. *Lancet.* 1999;353:737-742.
- Marchais SJ, Guerin AP, Pannier BM, Delavaud G, London GM. Arterial compliance and blood pressure. *Drugs.* 1993;46:82-87.
- Miura H, Wachtel RE, Liu Y, Loberiza FR Jr, Saito T, Miura M, Guterman DD. Flow-induced dilation of human coronary arterioles: important role of Ca(2+)-activated K(+) channels. *Circulation.* 2001;103:1992-1998.
- Miyazaki H, Matsuoka H, Itabe H, Usui M, Ueda S, Okuda S, Imaizumi T. Hemodialysis impairs endothelial function via oxidative stress: effects of vitamin E-coated dialyzer. *Circulation.* 2000;101:1002-1006.
- Millasseau SC, Kelly RP, Ritter JM, Chowienczyk PJ. The vascular impact of aging and vasoactive drugs: comparison of two digital volume pulse measurements. *Am J Hypertens.* 2003;16:467-472.

- Molavi B, Mehta JL. Oxidative stress in cardiovascular disease: molecular basis of its deleterious effects, its detection, and therapeutic considerations. *Curr Opin Cardiol.* 2004;19:488-493.
- Olesen SP, Clapham DE, Davies PF. Haemodynamic shear stress activates a K⁺ current in endothelial cells. *Nature.* 1988;331:168-170.
- O'Rouke FO, Gallagher DE. Pulse wave analysis. *J Hypertens.* 1996; 14 Suppl 5): 147-157.
- Outinen PA, Sood SK, Pfeifer SI, Pamidi S, Podor TJ, Li J, Weitz JI, Austin RC. Homocysteine-induced endoplasmic reticulum stress and growth arrest leads to specific changes in gene expression in human vascular endothelial cells. *Blood.* 1999;94:959-967.
- Owen WF Jr, Lew NL, Liu Y, Lowrie EG, Lazarus JM. The urea reduction ratio and serum albumin concentration as predictors of mortality in patients undergoing hemodialysis. *N Engl J Med.* 1993;329:1001-1006.
- Parfrey PS. Cardiac disease in dialysis patients: diagnosis, burden of disease, prognosis, risk factors and management. *Nephrol Dial Transplant.* 2000;15:58-68.
- Parthasarathy S, Santanam N, Ramachandran S, Meilhac O. Oxidants and antioxidants in atherogenesis: an appraisal. *J Lipid Res.* 1999;40:2143-2157.
- Pastan S, Bailey J. Dialysis therapy. *N Engl J Med.* 1998;338:1428-1437.
- Pitrosch F, Passauer J, Fischer S, Fuecker K, Hanefeld M, Gross P. In type 2 diabetes, rosiglitazone therapy for insulin resistance ameliorates endothelial dysfunction independent of glucose control. *Diabetes Care.* 2004;27:484-490.
- Pohl U, Holtz J, Busse R, Bassenge E. Crucial role of the endothelium in the vasodilator response to flow in vivo. *Hypertension.* 1985;8:37-44.
- Rapaport RM, Murad F. Endothelium-derived and nitrovasodilator-induced relaxation of vascular smooth muscle: role of cyclic GMP. *J Cyclic Nucleotide Protein Phosphor Res.* 1983;9(4-5): 281-296.
- Raza K, Thambyrajah J, Townend JN, Exley AR, Hortas C, Filer A, Carruthers DM, Bacon PA. Suppression of inflammation in primary systemic vasculitis restores vascular endothelial function: lesson for atherosclerotic disease? *Circulation.* 2000;102:1470-1472.

- Ritz E, Deppisch R, Stier E, Hansch G. Atherogenesis and cardiac death: are they related to dialysis procedure and biocompatibility? *Nephrol Dial Transplant.* 1994;2:165-172
- Salem M, Ivanovich P, Mujais S. Biocompatibility of dialysis membranes. *Contrib Nephrol.* 1993; 103:55-64.
- Sarnak MJ, Levey AS, Schoolwerth AC, Coresh J, Culleton B, Hamm LL, McCullough PA, Kasiske BL, Kelepouris E, Klag MJ, Parfrey P, Pfeffer M, Raij L, Spinosa DJ, Wilson PW; American Heart Association Councils on Kidney in Cardiovascular Disease, High Blood Pressure Research, Clinical Cardiology, and Epidemiology and Prevention. Kidney disease as a risk factor for development of cardiovascular disease: a statement from the American Heart Association Councils on Kidney in Cardiovascular Disease, High Blood Pressure Research, Clinical Cardiology, and Epidemiology and Prevention. *Circulation.* 2003;108:2154-2169.
- Saw J, Levin A, Gin K. Coronary artery disease in chronic kidney disease patients: assessing the evidence for diagnosis, screening and revascularization. *Can J Cardiol.* 2004;20:807- 813.
- Shlipak MG, Heidenreich PA, Noguchi H, Chertow GM, Browner WS, McCellan MB. Association of Renal Insufficiency with Treatment and Outcomes after Myocardial Infarction in Eldery Patients. *Ann Intern Med.* 2002;137:555-562.
- Stenvinkel P. Inflammatory and atherosclerotic interactions in the depleted uremic patient. *Blood Purif.* 2001;19:53–61
- Stenvinkel P, Barany P. Anaemia, rHuEPO resistance, and cardiovascular disease in end-stage renal failure; links to inflammation and oxidative stress. *Nephrol Dial Transplant.* 2002;17:32-37.
- Takazawa K, Tanaka N, Fujita M, Matsuoka O, Saiki T, Aikawa M, Tamura S, Ibukiyama C. Assessment of vasoactive agents and vascular aging by the second derivative of photoplethysmogram waveform. *Hypertension.* 1998;32:365-370.
- Tepel M, Oxidative stress - does it play a role in the genesis of essential hypertension and hypertension of uremia? *Nephrol Dial Transplant.* 2003;18:1439-1442.
- Tepel M, Echelmeyer M, Orie NN, Zidek W. Increased intracellular reactive oxygen species in patients with end-stage renal failure: effect of hemodialysis. *Kidney Int.* 2000;58:867-872.

- Tepel M, van der Giet M, Statz M, Jankowski J, Zidek W: The antioxidant, acetylcysteine, reduces cardiovascular events in patients with end-stage renal failure: a randomized controlled trial. *Circulation*. 2003;107:992-995.
- van Guldener C, Janssen MJ, Lambert J, Steyn M, Donker AJ, Stehouwer CD. Endothelium-dependent vasodilation is impaired in peritoneal dialysis patients. *Nephrol Dial Transplant*. 1998;13:1782-1786.
- Vaziri ND, Ni Z, Oveis F, Liang K, Pandian R. Enhanced nitric oxide inactivation and protein nitration by reactive oxygen species in renal insufficiency. *Hypertension*. 2002;39:135-141.
- Wolin MS. Interactions of oxidants with vascular signaling systems. *Arterioscler Thromb Vasc Biol*. 2000;20:1430-1442.
- Yeun JY, Kaysen GA. C-reactive protein, oxidative stress, homocysteine, and troponin as inflammatory and metabolic predictors of atherosclerosis in ESRD. *Curr Opin Nephrol Hypertens*. 2000;9:621-630.
- Zoccali C, Bode-Boger S, Mallamaci F, Benedetto F, Tripepi G, Malatino L, Cataliotti A, Bellanuova I, Fermo I, Frolich J, Boger R. Plasma concentration of asymmetrical dimethylarginine and mortality in patients with end-stage renal disease: a prospective study. *Lancet*. 2001;358:2113-2117.