Effects of exercise training on patients with CKD

1. Anderson, J.E.; Boivin, M.R.; Hatchett, L.: Effect of exercise training on interdialytic ambulatory and treatment-related blood pressure in hemodialysis patients. Renal Failure, Vol. 36, No. 5, 2004, 539-544
2. Banerjee, A.; Kong, CH.; Farrington, K.: The haemodynamic response to submaximalexercise during isovolaemic haemodialysis. Nephrol Dial Transplant, Vol. 19, (2004): 1528-32
3. Borregaard, S; Kruse, N; Rieckert, H.: Bewegungstherapie während einer Dialyse. Eine experimentelle Studie zum Kraft- und Ausdauerverhalten und zur Lebensqualität. Dtsch Z Sportmed, Vol. 54, (2003): 347-351
4. Boyce, M.; Robergs, R.; Avasthi, P.; Roldan, C.; Foster, A.; Montner, P.; Stark, D.; Nelson, C.: Exercise training by individuals with predialysis renal failure: cardiorespiratory endurance, hypertension, and renal function. Am J Kidney Dis 1997, 30, S. 180-192
5. Brenner I.: Exercise performance by hemodialysis patients: a review of the literature. Phys Sportsmed. 2009 Dec;37(4):84-96.
6. Bronas UG.: Exercise training and reduction of cardiovascular disease risk factors in patients with chronic kidney disease. Adv Chronic Kidney Dis. 2009 Nov;16(6):449-58.
7. Capitanini A, Cupisti A, Mochi N, Rossini D, Lupi A, Michelotti G, Rossi A. : Effects of exercise training on exercise aerobic capacity and quality of life in hemodialysis patients. J Nephrol. 2008 Sep-Oct;21(5):738-43.
8. Cappy, C. S., J. Jablonka, and E. T. Schroeder. "The effects of exercise during hemodialysis on physical performance and nutrition assessment." J.Ren Nutr. 9. Banerjee, A.; Kong, CH.; Farrington, K.: The haemodynamic response to submaximalexercise during isovolaemic haemodialysis. Nephrol Dial Transplant, Vol. 19, (2004): 1528-32
9. Carney, R.M.; McKevitt, P.M.; Goldberg, A.P.; Hagberg, J.; Delmez, J.A.; Harter, H.R.: Psychological effects of exercise training in hemodialysis patients. Nephron, Vol. 33 (3), 1983, S. 179-189
10. Carney, R.M.; Templeton, B.; Hong, B.A. et al: Exercise training reduces depression and increases the performance of pleasant activities in hemodialysis patients. Nephron 1987, 47, S. 194-198.
11. Castaneda C, Gordon PL, Uhlin KL, et al. Resistance training to counteract the catabolism of a low-protein diet in patients with chronic renal insufficiency: a randomized, controlled trial. Ann Intern Med 2001; 135 (11): 965-76
12. Castaneda, C.; Grossi, L.; Dwyer, J.: Potential benefits of resistance exercise training on nutritional status in renal failure. J Ren Nut 1998, 8, S. 2-10
13. Cheema B, Abas H, Smith B, O'Sullivan A, Chan M, Patwardhan A, Kelly J, Gillin A, Pang G, Lloyd B, Singh MF.: Progressive exercise for anabolism in kidney disease (PEAK): a randomized, controlled trial of resistance training during hemodialysis.J Am Soc Nephrol. 2007 May;18(5):1594-601. Epub 2007 Apr 4
14. Cheema B, AbasH, Smith B, et al. Randomized controlled trial of intradialytic resistance training to target muscle wasting in ESRD: the

Progressive Exercise for Anabolism in Kidney Disease (PEAK) study. Am J Kidney Dis 2007; 50: 574-84
15. Chen JL, Godfrey S, Ng TT, et al. Effect of intra-dialytic, low intensity strength training on functional capacity in adult haemodialysis patients: a randomized pilot trial. Nephrol Dial Transplant 2010; 25: 1936-43
16. Clyne N, Ekholm J, Jogestrand T, et al. Effects of exercise training in predialytic uremic patients. Nephron 1991; 59: 84-9
17. Clyne, N.; Ekholm, J.; Jogestrand, T.; Lins, L.E.; Pehrsson, S.K.: Effects of exercise training in predialytic uremic patients. Nephron 1991, 59, S. 84-89
18. Couto CI.: Resistance exercise training improves strength and quality of life in patients undergoing haemodialysis. Aust J Physiother. 2007;53(4):288.
19. Davis, T.A.; Karl, I.E.; Goldberg A.P.; Harter, H.R.: Effects of exercise training on muscle protein catabolism in uremia. Kidney Int 1993, 16, S. 52-57
20. Deligiannis A, Kouidi E, Tassoulas E, et al. Cardiac effects of exercise rehabilitation in hemodialysis patients. Int J Cardiol 1999; 70: 253-66
21. Deligiannis A, Kouidi E, Tourkantonis A. Effects of physical training on heart rate variability in patients on hemodialysis. Am J Cardiol 1999; 84: 197-202
22. Deligiannis, A.: Renal exercise rehabilitation: cardiac and skeletal muscle benefits in dialysis patients. Clin Nephrol, 2003
23. Deligiannis, A.; Kouidi, E.; Tassoulas, E.; Gigis, P.; Tourkantonis, A.; Coats, A.: Cardiac effects of exercise rehabilitation in hemodialysis patients. International Journal of Cardiology, 70, Nr. 3, 1999, S. 253-266
24. Deligiannis, A.; Kouidi, E.; Tourkantonis, A.: Effects of physical training on heart rate variability in patients on hemodialysis. American Journal of Cardiology, Vol. 84, 1999, S. 197-202
25. DePaul V, Moreland J, Eager T, et al. The effectiveness of aerobic and muscle strength training in patients receiving hemodialysis and EPO: a randomized controlled trial. Am J Kidney Dis 2002; 40: 1219-29
26. Eidemak I, Haaber AB, Feldt-Rasmussen B, et al. Exercise training and the progression of chronic renal failure. Nephron 1997; 75: 36-40
27. Erbacher, H.: Auswirkungen eines sportlichen Trainings während der Hämodialysebehandlung auf ausgewählte Blutparameter. Diplomarbeit Deutsche Sporthochschule Köln 1999
28. Fitts, S.S.; Guthrie, M.R.; Blagg, C.R.: Exercise coaching and rehabilitation counseling improve quality of life for predialysis and dialysis patients. Nephron, 82, 1999, S. 115-121
29. Goldberg AP, Geltman EM, Hagberg JM, et al. Therapeutic benefits of exercise training for hemodialysis patients. Kidney Int 1983; 16: S303-9
30. Goldberg, A., Hagberg, J., Delmez, J., Florman, R., Harter, H.: The metabolic and psychological effects of exercise training in hemodialysis patients. Am H Clin Nutr 1997, 33, S. 1620-1628
31. Goldberg, A.P.; Geltman, E.M.; Gavin, J.R. 3rd; Carney, R.M.; Hagberg, J.M.; Delmez, J.A.; Naumovich, A.; Oldfield, M.H.; Harter, H.R.: Exercise training reduces coronary risk and effectively rehabilitates hemodialysis patients.
Nephron 1986, 42, S. 311-316

32. Goldstein SL, Montgomery LR.: A pilot study of twice-weekly exercise during hemodialysis in children. Pediatr Nephrol. 2009 Apr;24(4):833-9. Epub 2008 Dec 18.
33. Hagberg JM, Goldberg AP, Ehsani AA, et al. Exercise training improves hypertension in hemodialysis patients. Am J Nephrol 1983; 3: 209-12
34. Hagberg, J.M.; Goldberg, A.P.; Ehsani, A.A.; Heath, G.W.; Delmez, J.A.; Harter, H.R.: Exercise training improves hypertension in hemodialysis patients. Am J Nephrol 1983, 3, S. 209-212
35. Hamiwka LA, Cantell M, Crawford S, et al.: Physical activity and health related quality of life in children following kidney transplantation. Pediatr Transplant. 2009 Nov;13(7):861-7. Epub 2009 Jun 2.
36. Headley S, Germain M, Mailloux P, et al. Resistance training improves strength and functional measures in patients with end-stage renal disease. Am J Kidney Dis 2002; 40: 355-64
37. Headley, S. et al. "Resistance training improves strength and functional measures in patients with end-stage renal disease." Am.J.Kidney Dis. 40.2 (2002): 355-64.
38. Heiwe S, Clyne N, Tollba¨ck A, et al. Effects of regular resistance training on muscle histopathology and morphometry in elderly patients with chronic kidney disease. Am J Phys Med Rehabil 2005; 84 (11): 865-74
39. Heiwe S, Tollba¨ ck A, Clyne N. Twelve weeks of exercise training increases muscle function and walking capacity in elderly predialysis patients and healthy subjects. Nephron 2001; 88 (1): 48-56
40. Hiatt, W. R. et al. "Carnitine metabolism during exercise in patients on chronic hemodialysis." Kidney Int. 41.6 (1992): 1613-19.
41. Jang EJ, Kim HS.: [Effects of exercise intervention on physical fitness and health-relalted quality of life in hemodialysis patients]. J Korean Acad Nurs. 2009 Aug;39(4):584-93.
42. Jetté, M.; Posen, G.; Cardarelli, C.: Effects of an exercise programme in a patient undergoing hemodialysis treatment. The Journal of sports medicine and physical fitness, Vol. 17 (2), 1977
43. Johansen K, Painter P.: Exercise for patients with CKD: what more is needed? Adv Chronic Kidney Dis. 2009 Nov;16(6):407-9.
44. Johansen KL, Painter PL, Sakkas GK, et al. Effects of resistance exercise training and and nandrolone decanoate on body composition and muscle function among patients who receive hemodialysis: a randomized, controlled trial. J Am Soc Nephrol 2006; 17: 2307-14
45. Johansen KL.: Physical functioning and exercise capacity in patients on dialysis. Adv Ren Replace Ther. 1999 Apr;6(2):141-8.
46. Karamouzis I, Grekas D, Karamouzis M, Kallaras K, Stergiou-Michailidou V, Kouidi E, Deligiannis A, Vavatsi-Christaki N.: Physical training in patients on hemodialysis has a beneficial effect on the levels of eicosanoid hormone-like substances. Hormones (Athens). 2009 Apr-Jun;8(2):129-37.
47. Koh KP, Fassett RG, Sharman JE, et al. Effect of intradialytic versus home-based aerobic exercise training on physical function and vascular parameters in hemodialysis patients: a randomized pilot study. Am J Kidney Dis 2010 Jan; 55 (1): 88-99
48. Kong, C.H.; Tattersall, J.E.; Greenwood, R.N.; Farrington, K.: The effect of exercise during haemodialysis on solute removal. Nephrol Dial Transplant 1999, 14, S. 2927-2931

49. Konstantinidou E, Koukouvou G, Kouidi E, et al. Exercise training in patients with end-stage renal disease on hemodialysis: comparison of three rehabilitation programs. J Rehabil Med 2002; 34: 40-5
50. Koufaki P, Mercer T.: Assessment and monitoring of physical function for people with CKD. Adv Chronic Kidney Dis. 2009 Nov;16(6):410-9.
51. Koufaki P, Mercer TH, Naish PF. Effects of exercise training on aerobic and functional capacity of end-stage renal disease patients. Clin Physiol Funct Imaging 2002; 22: 115-24
52. Koufaki P, Nash PF, Mercer TH. Assessing the efficacy of exercise training in patients with chronic disease. Med Sci Sports Exerc 2002; 34: 1234-41
53. Koufaki, P.: The effect of erythropoeitin therapy and exercise rehabilitation on the cardiorespiratory performance of patients with end-stage renal disease. Unpublished PhD thesis, 2001, the Manchester Metropolitan University
54. Kouidi E, Grekas D, Deligiannis A, et al. Outcomes of longterm exercise training in dialysis patients: comparison of two training programs. Clin Nephrol 2004; 61 Suppl. 1: S31-8
55. Kouidi E, Iacovides A, Iordanidis P, et al. Exercise renal rehabilitation program: psychological effects. Nephron 1997; 77: 152-8
56. Kouidi E, Karagiannis V, Grekas D, Iakovides A, Kaprinis G, Tourkantonis A, Deligiannis A.: Depression, heart rate variability, and exercise training in dialysis patients. Eur J Cardiovasc Prev Rehabil. 2010 Apr;17(2):160-7.
57. Kouidi E. Health related quality of life in end-stage renal disease patients: the effects of renal rehabilitation. Clin Nephrol 2004; 61 Suppl. 1: S60-71
58. Kouidi EJ, Grekas DM, Deligiannis AP.: Effects of exercise training on noninvasive cardiac measures in patients undergoing long-term hemodialysis: a randomized controlled trial. Am J Kidney Dis. 2009 Sep;54(3):511-21. Epub 2009 Jul 30.
59. Kouidi, E.; Albani, M.; Natsis, K.; Megalopoulos, A.; Gigis, P.; Guiba-Tziampiri, O.; Tourkantonis, A.; Deligiannis, A.: The effects of exercise training on muscle atrophy in haemodialysis patients. Nephrology-Dialysis- Transplantation, 13, 1998, S. 685-699
60. Kouidi, E.; Grekas, D.; Deligiannis, A.; Tourkantonis, A.: Beneficial effects of long-term Exercise trainig on physical fitness in dialysis patients: Comparison of two training Programs. Clin Nephrol 2004; 61 Suppl. 1:S31-8.
61. Kouidi, E.; Vassiliou, S.; Grekas, D.; Deligiannis, A.; Tourkantonis, A.: Cardiorespiratory adaptations to long term physical training in dialysis patients. Proceedings of the XXXVII Congress of ERA-EDTA, 2000 Nice: 306
62. Kouidi, E: Central and peripheral adaptions to physical training in patients with end-stage renal disease. Sports Medicine, 31 (9), 2001, S. 651-665
63. Krause, R.; Abel, H.H.; Fuhrmann, I. Mienert, K.; Bennhold, I.; Koepchen, H.P.: Wirkung von Ergometertraining auf körperliche Leistungsfähigkeit, Herz-Kreislaufregulation und Muskelstoffwechsel bei Hämodialysepatienten und Nierentransplantiereten. Proc. 11. Symp. AfnP, W.Pabst-Verlag Lengerich: 1990

64. Krause, R.; Abel, H.H.; Mienert, K.; Bennhold, I.; Koepchen, H.P.: Antihypertensive effects of endurance training during renal replacement therapy. Int J Sports Med, 1991, 12, S. 137
65. Krüger, M.: Lebensqualität und terminale Niereninsuffizienz Studie über ein 10-wöchiges Sportprogramm während der Hämodialyse mit Hilfe des standardisierten Fragebogens SF 36. Diplomarbeit Deutsche Sporthochschule Köln 2000
66. Leaf DA, Kleinman MT, Deitrick RW. The effects of exercise on markers of lipid peroxidation in renal dialysis patients compared with control subjects.AmJMed Sci 2004; 327: 9-14
67. Leehey DJ, Moinuddin I, Bast JP, et al. Aerobic exercise in obese diabetic patients with chronic kidney disease: a randomized and controlled pilot study. Cardiovasc Diabetol 2009; 8: 62
68. Lo C, Li L, Lo WK, et al. Benefits of exercise training in patients on continuous ambulatory peritoneal dialysis. Am J Kidney Dis 1998; 32 (6): 1011-8
69. Malagoni AM, Catizone L, Mandini S, et al: Acute and long-term effects of an exercise program for dialysis patients prescribed in hospital and performed at home. J Nephrol. 2008 Nov-Dec;21(6):871-8
70. Manfredini F, Rigolin GM, Malagoni AM, Catizone L, Mandini S, Sofritti O, Mauro E, Soffritti S, Boari B, Cuneo A, Zamboni P, Manfredini R.: Exercise training and endothelial progenitor cells in haemodialysis patients. J Int Med Res. 2009 Mar-Apr;37(2):534-40.
71. Masuda R, Imamura H, Mizuuchi K, Miyahara K, Kumagai H, Hirakata H.: Physical activity, high-density lipoprotein cholesterol subfractions and lecithin:cholesterol acyltransferase in dialysis patients. Nephron Clin Pract. 2009;111(4):c253-9. Epub 2009 Mar 17.
72. Matsumoto Y, Furuta A, Furuta S, Miyajima M, Sugino T, Nagata K, Sawada S.: The impact of pre-dialytic endurance training on nutritional status and quality of life in stable hemodialysis patients (Sawada study).Ren Fail. 2007;29(5):587-93.
73. Mercer TH, Crawford C, Gleeson NP, et al. Low volume exercise rehabilitation improves functional capacity and self-reported functional status of dialysis patients. Am J Phys Med Rehabil 2002; 81: 162-7
74. Mercer, T.H.; Craxford, C.; Gleeson, N.; Naish, P.: Low-Volume exercise rehabilitation improves functional capacity and self-reported functional status of dialysis patients. Am J Phys Rehabil, 2002, 81, S. 162-167
75. Mercer, T.H.; Koufaki, P.; Naish, P.F.: Exercise training improves functional capacity, nutritional status and self-reported activity of daily living in peritoneal dialysis patients. Med Sci Sports Exerc, 2001, 33, S. 254
76. Miller, B.W.; Cress, C.L.; Johnson, M.E.; Nichols, D.H.; Schnitzler, M.A.: Exercise during hemodialysis decreases the use of antihypertensive medications. American Journal of Kidney Diseases, Vol. 39, Nr. 4, 2002, S. 828-833
77. Moinuddin I, Leehey DJ.: A comparison of aerobic exercise and resistance training in patients with and without chronic kidney disease. Adv Chronic Kidney Dis. 2008 Jan;15(1):83-96
78. Molsted S, Eidemak I, Sorensen HT, et al. Five months of physical exercise in hemodialysis patients: effects on aerobic capacity, physical function and self rated health. Nephron Clin Practice 2004; 96: c76-81

79. Moore, G.E.; Painter, P.L.; Brinker, K.R.; Stray-Gundersen, J.; Mitchell, J.H.: Cardiovascular response to submaximal stationary cycling during hemodialysis. Am J Kidney Dis 1998, 31, S. 631-637
80. Mustata S,Groeneveld S,DavidsonW, et al. Effects of exercise training on physical impairment, arterial stiffness and health related quality of life in patients with chronic kidney disease: a pilot study. Int Urol Nephrol. Epub 2010 Sep 15
81. Nonoyama ML, Brooks D, Ponikvar A, Jassal SV, Kontos P, Devins GM, Spanjevic L, Heck C, Laprade J, Naglie G:Exercise program to enhance physical performance and quality of life of older hemodialysis patients: a feasibility study. Int Urol Nephrol. 2010 Dec;42(4):1125-30. Epub 2010 Mar 7.
82. Oh-Park M, Fast A, Gopal S, et al. Exercise for the dialyzed: aerobic and strength training during hemodialysis. Am J Phys Med Rehabil 2002; 81 (11): 814-21
83. Ota S, Takashashi K, Suzuki H, et al. Exercise rehabilitation for elderly patients on chronic hemodialysis. Ger Nephrol Urol 1996; 5: 157-65
84. Ouzouni S, Kouidi E, Sioulis A, et al. Effects of intradialytic exercise training on health-related quality of life indices in haemodialysis patients. Clin Rehabil 2009; 23 (1): 53-63
85. Ouzouni S, Kouidi E, Sioulis A, Grekas D, Deligiannis A.: Effects of intradialytic exercise training on health-related quality of life indices in haemodialysis patients. Clin Rehabil. 2009 Jan;23(1):53-63.
86. Painter P, Moore G, Carlson L, et al. The effects of exercise training plus normalization of hematocrit on exercise capacity and health-related quality of life. Am J Kidney Dis 2002; 39: 257-65
87. Painter P.: Implementing exercise: what do we know? Where do we go? Adv Chronic Kidney Dis. 2009 Nov;16(6):536-44.
88. Painter PL, Hector L, Ray K, et al. Randomized trial of exercise training after renal transplantation. Transplant 2002; 74 (1): 42-8
89. Painter PL, Nelson-Worel JN, Hill MM, et al. Effects of exercise training during hemodialysis. Nephron 1986; 43: 87-92
90. Painter, P.: Physical functioning in end-stage renal disease patients: update 2005. Hemodial Int. 2005 Jul;9(3):218-35
91. Painter, P.; Carlson, L.; Carey, S.; Paul, S.; Myll, J.: Low-functioning hemodialysis patients improve with exercise training. Am J of Kidney Diseases, Vol. 36, Nr. 3 (September), 2000a, S. 600-608
92. Painter, P.; Carlson, L.; Carey, S.; Paul, S.M.; Myll, J.: Physical functioning and health-related quality-of-life changes with exercise training in hemodialysis patients. American Journal of Kidney Diseases, Vol. 35, Nr. 3, 2000, S. 482-492
93. Painter, P.; Moore, G.; Carlson, L.; Paul, S.; Myll, J.; Phillips, W.; Haskel, W.: Effects of exercise training plus normalization of hematocrit on exercise capacity and health-rekated quality of life. American Journal of Kidney diseases, Vol. 39, Nr. 2, 2002, S. 257-265
94. Parsons TL, King-Vanvlack CE.: Exercise and end-stage kidney disease: functional exercise capacity and cardiovascular outcomes. Adv Chronic Kidney Dis. 2009 Nov;16(6):459-81. Review.
95. Patel DR, Raj VM, Torres A.: Chronic kidney disease, exercise, and sports in children, adolescents, and adults. Phys Sportsmed. 2009 Oct;37(3):11-9.

96. Petersen AC, Leikis MJ, McMahon LP, et al. Effects of endurance training on extrarenal potassium regulation and exercise performance in patients on heamodialysis. Nephrol Dial Transplant 2009; 24: 2882-8
97. Petraki M, Kouidi E, Grekas D, Deligiannis A.: Effects of exercise training during hemodialysis on cardiac baroreflex sensitivity. Clin Nephrol. 2008 Sep;70(3):210-9.
98. Petraki M, Kouidi E, Grekas D, et al. Effects of exercise training during hemodialysis on cardiac baroreflex sensitivity. Clin Nephrol 2008; 70 (3): 210-9
99. Poortmans JR, Hermans L, Vandervliet A, et al. Renal responses to exercise in heart and kidney transplant patients. Transplant Int 1997; 10: 323-7
100. Pupim, L. B. et al. "Exercise augments the acute anabolic effects of intradialytic parenteral nutrition in chronic hemodialysis patients." Am.J.Physiol Endocrinol.Metab 286.4 (2004): E589-E597.
101. Reboredo Mde M, Henrique DM, Faria Rde S, Chaoubah A, Bastos MG, de Paula RB: Exercise training during hemodialysis reduces blood pressure and increases physical functioning and quality of life. Artif Organs. 2010 Jul;34(7):586-93. Epub 2010 May 21.
102. Ridley, J., K. Hoey, and N. Ballagh-Howes. "The exercise-during-hemodialysis program: report on a pilot study." CANNT.J. 9.3 (1999): 20-26.
103. Rus R, Ponikvar R, Kenda RB, et al. Effects of handgrip training and intermittent compression of upper arm veins on forearm vessels in patients with end-stage renal failure. Ther Apher Dial 2005; 9: 241-4
104. Sakkas GK, Hadjigeorgiou GM, Karatzaferi C, et al. Intradialytic aerobic exercise training ameliorates symptoms of restless legs syndrome and improves functional capacity in patients on hemodialysis: a pilot study. ASAIO J 2008; 54 (2): 185-90
105. Sakkas, G.; Ball, D.; Naish, P.F.; Koufaki, P.; Mercer, T.H.; Sargeant, A.J.: Changes in the muscle morphology of dialysis patients after six months of aerobic exercise training. Nephrol Dial Trans, 2003, 18, S. 1854-1861
106. Segura-Ortí E, Kouidi E, Lisón JF.: Effect of resistance exercise during hemodialysis on physical function and quality of life: randomized controlled trial. Clin Nephrol. 2009 May;71(5):527-37.
107. Segura-Ortí E.: [Exercise in haemodyalisis patients: a literature systematic review] Nefrologia. 2010;30(2):236-46. doi: 10.3265/Nefrologia.pre2010.Jan.10229. Epub 2010 Jan 21. Review. Spanish.
108. Segura-Ortı´ E, Kouidi E, Liso´ n JF. Effect of resistance exercise during hemodialysis on physical function and quality of life: randomized controlled trial. Clin Nephrol 2009; 71 (5): 527-37
109. Shalom, R.; Blumenthal, J.A.; Williams, R.S.; McMurray, R.G.; Dennis, V.W.: Feasibility and benefits of exercise training in patients on maintenance dialysis. Kidney International, 25 (6),1984, S. 958-963
110. Stefanović V, Milojković M.: Effects of physical exercise in patients with end stage renal failure, on dialysis and renal transplantation: current status and recommendations. Int J Artif Organs. 2005 Jan;28(1):8-15
111. Storer TW, Casaburi R, Sawelson S, et al. Endurance exercise training during haemodialysis improves strength, power, fatigability and

physical performance in maintenance haemodialysis patients. Nephrol Dial Transplant 2005; 20 (7): 1429-37
112. Suh, M.R.; Jung, H.H.; Kim, S.B.; Park, J.S.; Yang, W.S.: Effects of regular exercise on anxiety, depression and quality of Life in maintenance hemodialysis patients. Renal failure, 24 (3), 2002, S.: 337-345
113. Vaithilingham, I.; Polkinghorne, K.R.; Atkins, R.C.; Kerr, P.G.: Time and exercise improve phosphate removal in hemodialysis patients. Am J Kidney Dis 2004, 43, S. 85-89
114. van Bergen M, Takken T, Engelbert R, Groothoff J, Nauta J, van Hoeck K, Helders P, Lilien M. Exercise training in pediatric patients with end-stage renal disease. Pediatr Nephrol. 2009 Mar;24(3):619-22. Epub 2008 Oct 7.
115. van den Ham EC, Kooman JP, Schols AM, et al. The functional, metabolic, and anabolic responses to exercise training in renal transplant and hemodialysis patients. Transplant 2007; 83 (8): 1059-68
116. van den Ham EC, Kooman JP, Schols AM, Nieman FH, Does JD, Akkermans MA, Janssen PP, Gosker HR, Ward KA, MacDonald JH, Christiaans MH, Leunissen KM, van Hooff JP.: The functional, metabolic, and anabolic responses to exercise training in renal transplant and hemodialysis patients.Transplantation. 2007 Apr 27;83(8):1059-68.
117. van Vilsteren MC, deGreefMHG, Huisman RM. The effects of a low-to-moderate intensity preconditioning exercise programme linked with exercise counselling for sedentary haemodialysis patients in The Netherlands: results of a randomized clinical trial. Nephrol Dial Transplant 2005; 20 (1): 141-6
118. Wilmund KR, Tomayko EJ, Wu P, et al. Intradialytic exercise training reduces oxidative stress and epicardial fat: a pilot study. Nephrol Dial Transplant 2010; 25: 2695-701
119. Wilund KR, Tomayko EJ, Wu PT, Ryong Chung H, Vallurupalli S, Lakshminarayanan B, Fernhall B.:Intradialytic exercise training reduces oxidative stress and epicardial fat: a pilot study. Nephrol Dial Transplant. 2010 Aug;25(8):2695-701. Epub 2010 Feb 26.
120. Yurtkuran M, Alp A, Yurtkuran M, et al. A modified yogabased exercise program in hemodialysis patients: a randomized controlled study. Complement TherMed 2007; 15: 164-71
121. Zabetakis PM, Gleim GW, Pasternack FL, et al. Long duration submaximal exercise conditioning in hemodialysis patients. Clin Nephrol 1982; 18 (1): 17-22