

9. Literaturverzeichnis

1. Bamberger, C.M., H.M. Schulte, and G.P. Chrousos, *Molecular determinants of glucocorticoid receptor function and tissue sensitivity to glucocorticoids*. *Endocr Rev*, 1996. **17**(3): p. 245-61.
2. Reichardt, H.M., et al., *DNA binding of the glucocorticoid receptor is not essential for survival*. *Cell*, 1998. **93**(4): p. 531-41.
3. Mager, D.E., N. Moledina, and W.J. Jusko, *Relative immunosuppressive potency of therapeutic corticosteroids measured by whole blood lymphocyte proliferation*. *J Pharm Sci*, 2003. **92**(7): p. 1521-5.
4. Bruner, K.L., et al., *The unliganded mineralocorticoid receptor is associated with heat shock proteins 70 and 90 and the immunophilin FKBP-52*. *Recept Signal Transduct*, 1997. **7**(2): p. 85-98.
5. Coirini, H., et al., *Further studies of brain aldosterone binding sites employing new mineralocorticoid and glucocorticoid receptor markers in vitro*. *Brain Res*, 1985. **361**(1-2): p. 212-6.
6. Mirshahi, M., et al., *The mineralocorticoid hormone receptor and action in the eye*. *Biochem Biophys Res Commun*, 1996. **219**(1): p. 150-6.
7. Nagata, K., et al., *Mineralocorticoid receptor antagonism attenuates cardiac hypertrophy and failure in low-aldosterone hypertensive rats*. *Hypertension*, 2006. **47**(4): p. 656-64.
8. Cole, T.J., et al., *Targeted disruption of the glucocorticoid receptor gene blocks adrenergic chromaffin cell development and severely retards lung maturation*. *Genes Dev*, 1995. **9**(13): p. 1608-21.
9. Bleich, M., et al., *Rescue of the mineralocorticoid receptor knock-out mouse*. *Pflugers Arch*, 1999. **438**(3): p. 245-54.
10. Oelkers, W., T. Boelke, and V. Bahr, *Dose-response relationships between plasma adrenocorticotropin (ACTH), cortisol, aldosterone, and 18-hydroxycorticosterone after injection of ACTH-(1-39) or human corticotropin-releasing hormone in man*. *J Clin Endocrinol Metab*, 1988. **66**(1): p. 181-6.
11. Weitzman, E.D., et al., *Twenty-four hour pattern of the episodic secretion of cortisol in normal subjects*. *J Clin Endocrinol Metab*, 1971. **33**(1): p. 14-22.
12. Hubl, W., et al., *Radioimmunoassay for aldosterone in plasma without chromatography*. *Endokrinologie*, 1975. **66**(3): p. 292-300.
13. Ballard, P.L., et al., *A radioreceptor assay for evaluation of the plasma glucocorticoid activity of natural and synthetic steroids in man*. *J Clin Endocrinol Metab*, 1975. **41**(2): p. 290-304.
14. Conn, J.W., et al., *Intermittent aldosteronism in periodic paralysis; dependence of attacks on retention of sodium, and failure to induce attacks by restriction of dietary sodium*. *Lancet*, 1957. **272**(6973): p. 802-5.
15. Schambelan, M., J.R. Stockigt, and E.G. Biglieri, *Isolated hypoaldosteronism in adults. A renin-deficiency syndrome*. *N Engl J Med*, 1972. **287**(12): p. 573-8.

16. Williams, F.A., Jr., et al., *Acquired primary hypoadosteronism due to an isolated zona glomerulosa defect*. N Engl J Med, 1983. **309**(26): p. 1623-7.
17. Vallotton, M.B., *Endocrine emergencies. Disorders of the adrenal cortex*. Baillieres Clin Endocrinol Metab, 1992. **6**(1): p. 41-56.
18. Jacobs, T.P., et al., *Addisonian crisis while taking high-dose glucocorticoids. An unusual presentation of primary adrenal failure in two patients with underlying inflammatory diseases*. Jama, 1988. **260**(14): p. 2082-4.
19. Beato, M. and J. Klug, *Steroid hormone receptors: an update*. Hum Reprod Update, 2000. **6**(3): p. 225-36.
20. Pipitone, N., V. Pipitone, and C. Pitzalis, *[Glucocorticoids at the threshold of the new millennium: recent findings on the anti-inflammatory and immunomodulator mechanisms of action and future perspectives]*. Ann Ital Med Int, 2001. **16**(3): p. 141-54.
21. Riccardi, C., S. Bruscoli, and G. Migliorati, *Molecular mechanisms of immunomodulatory activity of glucocorticoids*. Pharmacol Res, 2002. **45**(5): p. 361-8.
22. Klein, N.C., C.H. Go, and B.A. Cunha, *Infections associated with steroid use*. Infect Dis Clin North Am, 2001. **15**(2): p. 423-32, viii.
23. Andrews, R.C. and B.R. Walker, *Glucocorticoids and insulin resistance: old hormones, new targets*. Clin Sci (Lond), 1999. **96**(5): p. 513-23.
24. Oikarinen, A. and P. Autio, *New aspects of the mechanism of corticosteroid-induced dermal atrophy*. Clin Exp Dermatol, 1991. **16**(6): p. 416-9.
25. Bland, R., *Steroid hormone receptor expression and action in bone*. Clin Sci (Lond), 2000. **98**(2): p. 217-40.
26. Bush, I.E., *Chemical and biological factors in the activity of adrenocortical steroids*. Pharmacol Rev, 1962. **14**: p. 317-445.
27. Fried, J. and A. Borman, *Synthetic derivatives of cortical hormones*. Vitam Horm, 1958. **16**: p. 303-74.
28. Vogeser, M., R. Zachoval, and K. Jacob, *Serum cortisol/cortisone ratio after Synacthen stimulation*. Clin Biochem, 2001. **34**(5): p. 421-5.
29. Robecchi, A., F. Cartesegna, and V. Daneo, *[Research and observations on the therapeutic effects of intraarticular injections of prednisone and prednisolone.]*. Rev Rhum Mal Osteoartic, 1956. **23**(3): p. 218-21.
30. Bush, I.E., S.A. Hunter, and R.A. Meigs, *Metabolism of 11-oxygenated steroids. Metabolism in vitro by preparations of liver*. Biochem J, 1968. **107**(2): p. 239-58.
31. Bush, I.E. and V.B. Mahesh, *Metabolism of 11-oxygenated steroids. 3. Some 1-dehydro and 9 alpha-fluoro steroids*. Biochem J, 1964. **93**(2): p. 236-55.
32. Bush, I.E. and V.B. Mahesh, *Metabolism of 11-oxygenated steroids. 2. 2-Methyl steroids*. Biochem J, 1959. **71**(4): p. 718-42.
33. Bush, I.E. and V.B. Mahesh, *Metabolism of 11-oxygenated steroids. 1. Influence of the A/B ring junction on the reduction of 11-oxo groups*. Biochem J, 1959. **71**(4): p. 705-17.
34. Whorwood, C.B., et al., *Tissue localization of 11 beta-hydroxysteroid dehydrogenase and its relationship to the glucocorticoid receptor*. J Steroid Biochem Mol Biol, 1992. **41**(1): p. 21-8.

35. Agarwal, A.K., et al., *Cloning and expression of rat cDNA encoding corticosteroid 11 beta-dehydrogenase*. J Biol Chem, 1989. **264**(32): p. 18939-43.
36. Quinkler, M., et al., *Evidence for isoforms of 11 beta-hydroxysteroid dehydrogenase in the liver and kidney of the guinea pig*. J Endocrinol, 1997. **153**(2): p. 291-8.
37. Bujalska, I.J., et al., *Differentiation of adipose stromal cells: the roles of glucocorticoids and 11beta-hydroxysteroid dehydrogenase*. Endocrinology, 1999. **140**(7): p. 3188-96.
38. Bujalska, I.J., S. Kumar, and P.M. Stewart, *Does central obesity reflect "Cushing's disease of the omentum"?* Lancet, 1997. **349**(9060): p. 1210-3.
39. Vogeser, M., et al., *Increased ratio of serum cortisol to cortisone in acute-phase response*. Horm Res, 2002. **58**(4): p. 172-5.
40. Escher, G., et al., *Tumor necrosis factor alpha and interleukin 1beta enhance the cortisone/cortisol shuttle*. J Exp Med, 1997. **186**(2): p. 189-98.
41. New, M.I., et al., *Evidence for an unidentified steroid in a child with apparent mineralocorticoid hypertension*. J Clin Endocrinol Metab, 1977. **44**(5): p. 924-33.
42. Stewart, P.M., et al., *Syndrome of apparent mineralocorticoid excess. A defect in the cortisol-cortisone shuttle*. J Clin Invest, 1988. **82**(1): p. 340-9.
43. Ulmann, A., J. Menard, and P. Corvol, *Binding of glycyrrhetic acid to kidney mineralocorticoid and glucocorticoid receptors*. Endocrinology, 1975. **97**(1): p. 46-51.
44. Reeves, W.B., *NAD-dependent 11 beta-hydroxysteroid dehydrogenase in cultured human colonic epithelial cells*. Am J Physiol, 1995. **268**(6 Pt 1): p. C1467-73.
45. Petrelli, M.D., et al., *Differential expression of nuclear 11beta-hydroxysteroid dehydrogenase type 2 in mineralocorticoid receptor positive and negative tissues*. Endocrinology, 1997. **138**(7): p. 3077-80.
46. Yang, K., et al., *Effects of hypoxemia on 11 beta-hydroxysteroid dehydrogenase types 1 and 2 gene expression in preterm fetal sheep*. J Soc Gynecol Investig, 1997. **4**(3): p. 124-9.
47. Lombes, M., et al., *The mineralocorticoid receptor discriminates aldosterone from glucocorticoids independently of the 11 beta-hydroxysteroid dehydrogenase*. Endocrinology, 1994. **135**(3): p. 834-40.
48. Oelkers, W., et al., *Impaired renal 11 beta-oxidation of 9 alpha-fluorocortisol: an explanation for its mineralocorticoid potency*. J Clin Endocrinol Metab, 1994. **78**(4): p. 928-32.
49. Diederich, S., et al., *The metabolism of 9 alpha-fluorinated steroids in the human kidney*. Endocr Res, 1996. **22**(4): p. 803-10.
50. Lakshmi, V. and C. Monder, *Purification and characterization of the corticosteroid 11 beta-dehydrogenase component of the rat liver 11 beta-hydroxysteroid dehydrogenase complex*. Endocrinology, 1988. **123**(5): p. 2390-8.
51. Lakshmi, V. and C. Monder, *Evidence for independent 11-oxidase and 11-reductase activities of 11 beta-hydroxysteroid dehydrogenase: enzyme latency, phase transitions, and lipid requirements*. Endocrinology, 1985. **116**(2): p. 552-60.
52. Lowry, O.H., et al., *Protein Measurement with the Folin Phenol Reagent*. J Biol Chem, 1951. **193**: p. 265-275.

53. Gaignage, P., et al., *Applications of chromatographic and spectrometric techniques to the study of dexamethasone related compounds*. *Chromatographia*, 1989. **28**: p. 623-630.
54. Diederich, S., et al., *Metabolism of synthetic corticosteroids by 11 beta-hydroxysteroid-dehydrogenases in man*. *Steroids*, 1998. **63**(5-6): p. 271-7.
55. Stewart, P.M. and J.I. Mason, *Cortisol to cortisone: glucocorticoid to mineralocorticoid*. *Steroids*, 1995. **60**(1): p. 143-6.
56. Stewart, P.M., B.A. Murry, and J.I. Mason, *Type 2 11 beta-hydroxysteroid dehydrogenase in human fetal tissues*. *J Clin Endocrinol Metab*, 1994. **78**(6): p. 1529-32.
57. Stewart, P.M., B.A. Murry, and J.I. Mason, *Human kidney 11 beta-hydroxysteroid dehydrogenase is a high affinity nicotinamide adenine dinucleotide-dependent enzyme and differs from the cloned type I isoform*. *J Clin Endocrinol Metab*, 1994. **79**(2): p. 480-4.
58. Eckhoff, C., W. Oelkers, and V. Bahr, *Effects of two oral antimycotics, ketoconazole and fluconazole, upon steroidogenesis in rat adrenal cells in vitro*. *J Steroid Biochem*, 1988. **31**(5): p. 819-23.
59. Escher, G., et al., *Reduced 11beta-hydroxysteroid dehydrogenase activity in the remaining kidney following nephrectomy*. *Endocrinology*, 1998. **139**(4): p. 1533-9.
60. Alfaidy, N., et al., *Oxygen regulation of placental 11 beta-hydroxysteroid dehydrogenase 2: physiological and pathological implications*. *J Clin Endocrinol Metab*, 2002. **87**(10): p. 4797-805.
61. Gnanalingham, M.G., et al., *Chronic umbilical cord compression results in accelerated maturation of lung and brown adipose tissue in the sheep fetus during late gestation*. *Am J Physiol Endocrinol Metab*, 2005. **289**(3): p. E456-65.
62. Ferrari, P., et al., *Substrate and inhibitor specificity of the cloned human 11 beta-hydroxysteroid dehydrogenase type 2 isoform*. *Am J Physiol*, 1996. **270**(5 Pt 1): p. E900-4.
63. Bujalska, I.J., et al., *Hexose-6-phosphate dehydrogenase confers oxo-reductase activity upon 11 beta-hydroxysteroid dehydrogenase type 1*. *J Mol Endocrinol*, 2005. **34**(3): p. 675-84.
64. Kern, R.C. and D.Z. Pitovski, *Localization of 11 beta-hydroxysteroid dehydrogenase: specific protector of the mineralocorticoid receptor in mammalian olfactory mucosa*. *Acta Otolaryngol*, 1997. **117**(5): p. 738-43.
65. Addison, R.S., et al., *Metabolism of prednisolone by the isolated perfused human placental lobule*. *J Steroid Biochem Mol Biol*, 1991. **39**(1): p. 83-90.
66. Escher, G., F.J. Frey, and B.M. Frey, *11 beta-Hydroxysteroid dehydrogenase accounts for low prednisolone/prednisone ratios in the kidney*. *Endocrinology*, 1994. **135**(1): p. 101-6.
67. Diederich, S., et al., *11beta-hydroxysteroid dehydrogenase types 1 and 2: an important pharmacokinetic determinant for the activity of synthetic mineralo- and glucocorticoids*. *J Clin Endocrinol Metab*, 2002. **87**(12): p. 5695-701.
68. Grossmann, C., et al., *Transactivation via the human glucocorticoid and mineralocorticoid receptor by therapeutically used steroids in CV-1 cells: a comparison of their glucocorticoid and mineralocorticoid properties*. *Eur J Endocrinol*, 2004. **151**(3): p. 397-406.

69. Bahr, V., A.F. Pfeiffer, and S. Diederich, *The metabolic syndrome X and peripheral cortisol synthesis*. *Exp Clin Endocrinol Diabetes*, 2002. **110**(7): p. 313-8.
70. Schuster, D., et al., *The Discovery of New 11beta-Hydroxysteroid Dehydrogenase Type 1 Inhibitors by Common Feature Pharmacophore Modeling and Virtual Screening*. *J Med Chem*, 2006. **49**(12): p. 3454-3466.
71. Crowther, *Neonatal respiratory distress syndrome after repeat exposure to antenatal corticosteroids: a randomised controlled trial*. *Lancet*, 2006. **367**: p. 1913-1919.
72. van Runnard Heimel, P.J., et al., *The transplacental passage of prednisolone in pregnancies complicated by early-onset HELLP syndrome*. *Placenta*, 2005. **26**(10): p. 842-5.
73. Frey, F.J., G. Escher, and B.M. Frey, *Pharmacology of 11 beta-hydroxysteroid dehydrogenase*. *Steroids*, 1994. **59**(2): p. 74-9.