

E. 結論

血中 DHEA、DHEAS は耐糖能異常例でのインスリン感受性を決定する主要な因子ではないが、経静脈的 DHEAS 補充は中高年糖尿病症例のインスリン感受性の改善に有効な治療法となりうる可能性が示唆された。

F. 文献

- 1) Baulieu E E : Dehydroepiandrosterone (DHEA): a fountain of youth? *J Clin Endocrinol Metab* 81(9):3147-3151, 1996.
- 2) Yen TT, Allan JA, Pearson DV, Acton JM, Greenberg MM: Prevention of obesity in Avy/a mice by dehydroepiandrosterone. *Lipids* 12(5):409-413, 1977.
- 3) Coleman DL, Leiter EH, Schwizer RW : Therapeutic effects of dehydroepiandrosterone (DHEA) in diabetic mice. *Diabetes* 31(9):830-833, 1982.
- 4) Coleman DL, Schwizer RW, Leiter EH : Effect of genetic background on the therapeutic effects of dehydroepiandrosterone (DHEA) in diabetes-obesity mutants and in aged normal mice. *Diabetes* 33(1):26-32, 1984.
- 5) Nestler JE, Barlascini CO, Clore JN, Blackard WG : Dehydroepiandrosterone reduces serum low density lipoprotein levels and body fat but does not alter insulin sensitivity in normal men. *J Clin Endocrinol Metab* 66(1):57-61, 1988.
- 6) Usiskin KS, Butterworth S, Clore JN, Arad Y, Ginsberg HN, Blackard WG, Nestler JE : Lack of effect of dehydroepiandrosterone in obese men. *Int J Obes* 14(5):457-463, 1990.
- 7) Mortola JF, Yen SS : The effects of oral dehydroepiandrosterone on endocrine-metabolic parameters in postmenopausal women. *J Clin Endocrinol Metab* 71(3):696-704, 1990.
- 8) Buffington CK, Pourmotabbed G, Kitabchi AE : Case report: amelioration of insulin resistance in diabetes with dehydroepiandrosterone. *Am J Med Sci* 306(5):320-324, 1993.
- 9) Schriock ED, Buffington CK, Givens JR, Buster JE : Enhanced post-receptor insulin effects in women following dehydroepiandrosterone infusion. *J Soc Gynecol Investig* 1(1):74-78, 1994.
- 10) Morales AJ, Nolan JJ, Nelson JC, Yen SS : Effects of replacement dose of dehydroepiandrosterone in men and women of advancing age. *J Clin Endocrinol Metab* 78(6):1360-1367, 1994.
- 11) Casson PR, Faquin LC, Stentz FB, Straughn AB, Andersen RN, Abraham GE, Buster JE : Replacement of dehydroepiandrosterone enhances T-lymphocyte insulin binding in postmenopausal women. *Fertil Steril* 63(5):1027-1031, 1995.
- 12) Bergman RN : Toward physiological understanding of glucose tolerance. Minimal-model approach. *Diabetes* 38(12):1512-1527, 1989.
- 13) Barrett-Connor E, Khaw KT, Yen SS : A prospective study of dehydroepiandrosterone sulfate,

- mortality, and cardiovascular disease. N Engl J Med 315(24):1519-1524, 1986.
- 14) Higaki Y, Kagawa T, Fujitani J, Kiyonaga A, Shindo M, Taniguchi A, Nakai Y, Tokuyama K, Suzuki M, Tanaka H : Effects of a single bout of exercise on glucose effectiveness. J Appl Physiol 80(3):754-759, 1996.
- 15) D'Alessio DA, Kahn SE, Leusner CR, Ensinck JW : Glucagon-like peptide 1 enhances glucose tolerance both by stimulation of insulin release and by increasing insulin-independent glucose disposal. J Clin Invest 93(5):2263-2266, 1994.
- 16) Brun JF, Guintrand-Hugret R, Fons C, Carvajal J, Fedou C, Fussellier M, Bardet L, Orsetti A : Effects of oral zinc gluconate on glucose effectiveness and insulin sensitivity in humans. Biol Trace Elem Res 47(1-3):385-391, 1995.
- 17) Ader M, Pacini G, Yang YJ, Bergman RN : Importance of glucose per se to intravenous glucose tolerance. Comparison of the minimal-model prediction with direct measurements. Diabetes 34(11):1092-1103, 1985.
- 18) Lamberts SW, van den Beld AW, van der Lely AJ : The endocrinology of aging. Science 278(5337):419-424, 1997.
- 19) Chantelau E : Evidence that upregulation of serum IGF-1 concentration can trigger acceleration of diabetic retinopathy. Br J Ophthalmol 82(7):725-730, 1998.