

RELATION BETWEEN DEPRESSION AND MALNUTRITION IN THE ELDERLY DIABETICS

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Background: There are various factors affecting the nutritional status of the elderly. Depression has been known as an important factor of malnutrition in them. We had already reported the poor nutritional status of elderly diabetics [J Kor Diabetes Association 22(1):71, 1998].

Objective: We investigated to document the prevalence of malnutrition and its relationship to depression in elderly diabetic patients.

Materials & Methods: We studied 52 patients aged 65 and over (65-99 y, mean 76.7 y; 22 men, 30 women) with diabetes mellitus admitted during from 1996 through 1997. Malnutrition was diagnosed on presence of 1 or more criteria; 10% weight loss in last 3 months, serum albumin < 3.3 g/dL, serum transferrin < 200mg/dL, and blood total lymphocyte count < 1800/mm³. There were no significant differences between depressed Group and non-depressed Group in duration of diabetes, body mass index, fasting plasma glucose, HbA1c, and number of complication including hypoglycemic episodes. Depression was assessed on Hamilton Depression Scale score of 16 or more. Data were analyzed by Chi square test.

Results: 28/52 (53.9%) were malnourished, 12/52 (23.1%) having depression. Of the 23 patients with depression only 5 had malnutrition. No significant relation between depression and malnutrition was found ($\chi^2 = 2.689$, $p = 0.992$).

Conclusion: Depression might have no significant relationship to malnutrition in the elderly diabetic in-patients.

Changes in Bone Mineral Density in Renal Transplant Recipients: a Cross-Sectional and Longitudinal Study

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Kidney transplantation is a common procedure with good results with respect to graft function. Bone loss is an important problem in renal transplant recipients with an early bone loss that subsequently increases the risk of osteoporosis and fractures. However, not so much data are available about the annual bone loss after transplantation and it is not known whether bone loss continues in long-term survivors. To elucidate the changes of long-term bone loss in renal transplant recipients, we analysed cross-sectional evaluations of bone mineral density (BMD) measured by dual X-ray absorptiometry in 742 recipients (mean age: 39.01±10.22 years old, M/F=438/304, times after transplantation: 0-7 years after transplantation) and longitudinal evaluations with a follow-up time of 12 months in 442 recipients, and f-testosterone, IGF-I, 25(OH)-vitamin D, serum osteocalcin and urine DPD were analysed in 32 recipients. Lumbar Z-scores (age- and sex-matched) from the operation year to the seventh year were -0.37±1.38, -1.00±1.2, -1.07±1.21, -1.18±1.3, -1.22±1.31, -0.85±1.3, -0.93±1.3 and -0.90±1.47, and femur neck Z-score (age- and sex-matched) were -0.39±1.17, -0.70±1.02, -0.48±0.95, -0.39±0.96, -0.61±1.02, -0.51±1.10, -0.56±0.98 and -0.45±1.09, respectively.

Annual mean reduction of BMD with follow-up time of 12 months

years after transplantation	Lumbar(%)		Femur neck(%)	
	male	female	male	female
1	-3.77±4.65	-6.13±2.67	-4.65±2.70	-0.25±2.40
2	-3.37±1.50	-2.13±1.35	-3.16±0.95	-2.00±1.63
3	-1.85±1.35	-1.21±0.87	-2.43±1.33	-0.25±0.91
4	-0.93±1.23	-1.97±1.03	-1.21±1.86	-1.34±1.16
5	-0.32±0.73	-0.23±1.34	-1.07±0.68	-2.09±1.43
6	-0.76±1.41	-0.50±0.98	-1.60±0.89	-2.09±1.15
7	-0.33±1.25	0.88±1.43	1.93±1.39	-1.88±1.24

Reduction of BMD in spine after transplantation was the highest within the first and second post-transplant year in male and within the first year in female, and BMD in female continued to be decreased beyond the second year in contrast to the slight increase in male. However, reduction of BMD in femur neck was more pronounced in male. The percent of overall bone loss patients after the first post-transplant year was 67%, and the patients with consistent bone loss showed the significantly low IGF-I, f-testosterone and calcium intake. These data suggest that the precipitating causes of bone loss should be searched and corrected, besides steroid and CsA-induced osteoporosis.