

Relationship Between Vitamin D and Sexual Dysfunction in Dialysis Patients

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Objectives:

Sexual dysfunction is very common in dialysis patients. It impairs the quality of life. This work was done in order to assess the relationship between serum vitamin D levels with sexual dysfunction in dialysis patients.

Methods:

25-hydroxyvitamin D level of 41 dialysis patients were evaluated. 25-hydroxyvitamin D levels <30 ng / ml were accepted as vitamin D deficiency. Patients were divided into 3 groups according to the level of 25-hydroxyvitamin D: 25-hydroxyvitamin D level \leq 5 ng / ml group 1, 6-15 ng / ml group 2, 16-30 ng / ml group 3. We applied the Hospital Anxiety and Depression Scale (HADS), and Arizona Sexual Experiences Scale (ASEX) to all patients. ASEX for the total score was used as cut-off point 11. Values \geq 11 were considered as sexual dysfunction. HADS anxiety subscale scores was taken as the cut-off point 10 and HADS depression subscale was taken as the cut-off point 7. Values greater than cut-off point were evaluated as anxiety and depression, respectively .

Results:

The mean age of patients was 51.8 \pm 16.9 years, 51% male, 49% were female. There were 16 hemodialysis and 25 peritoneal dialysis patients. The ratio of vitamin D level under 15 ng / ml was 87.8%. Sexual dysfunction rate of 85.4%, anxiety rate of 22.7%, depression rate of 50%. Sexual dysfunction rates in women and in men were 95.4% and 75%, respectively. There was a significant difference in terms of sexual dysfunction between vitamin D groups (group 2 versus 3 and group 1 versus 3, $p=0.05$). Vitamin D levels were positively correlated with the level of hemoglobin and albumin ($r = 0.349$, $p = 0.025$, $r = 0.419$, $p = 0.006$). Sexual dysfunction rate was 93.8% in hemodialysis patients and 80% in peritoneal dialysis patients ($p<0.05$). In hemodialysis patients ASEX total score was significantly worse than continuous ambulatory peritoneal dialysis patients. There was a positive correlation between ASEX total score and age ($r = 0.456$, $p = 0.003$).

Conclusions:

Vitamin D deficiency in addition to anemia, may contribute to sexual dysfunction. In hemodialysis patients sexual dysfunction is more common than peritoneal dialysis patients. Advanced age, malnutrition and vitamin D deficiency have negative impact on sexual life.

