E-Poster

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Vitamin D Deficincy in Spinal Cord Injury and Risc Factors

Topic: Rehabilitation Across the Continuum of Care

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BACKGROUND

Serum vitamin D levels in patients with chronic spinal cord injury (SCI) are lower than in healthy individuals. Approximately one third of those with SCI have vitamin D deficiency. Secondary hyperparathyroidism occurs due to vitamin D deficiency, low sun exposure in SCI, use of medications that affect vitamin D metabolism, decreased Ca absorption as a result of vitamin D deficiency, increased bone turnover and progressive bone loss. Vitamin D deficiency and risk factors were investigated in patients with spinal cord injuries.

METHODS

Two hundred fifty one patients with SCI were evaluated. Demographic and clinical values of the patients were examined retrospectively. 25(OH)vitamin D is the form of vitamin D found in the highest concentration in circulation due to its long systemic half-life.. Serum 25-hydroxyvitamin D [25(OH)D] level >30 ng/mL was defined as normal, 20-30 as deficiency, and < 20 as deficiency. 25(OH)vitamin D levels were grouped in winter and summer seasons. Regression analyzes were performed with the SPSS program. While evaluating the study data, mean, standard deviation, median, minimum and maximum values were used as descriptive statistical methods. Comparisons between groups were made with the Mann-Whitney U test.

RESULTS

The results were evaluated at the 95% confidence interval. Serum 25(OH)D level was determined as 8.3 ng/mL. There was a statistically significant correlation between level and 25(OH)D levels ($p < 0.05$). Functionality was a significant factor affecting serum 25(OH)D levels in SCI. Serum 25(OH)D levels were also lower in patients with OY whose BMI was above 26. There was a correlation between smoking and vitamin D levels.

CONCLUSION

Tetraplegics have lower 25 OH vitamin D levels than paraplegics, and it may change with seasons. Evaluation of SCI for vitamin D deficiency or insufficiency is routinely required.

Statement of Disclosures

None

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