10th International Conference on

Orthopedics, Trauma and Rheumatology

March 08-09, 2018   London, UK

Correlation of serum vitamin D levels with disease activity in ankylosing spondylitis

Gaurav Singh
Safdarjung Hospital, India

Purpose: The purpose of this study was to assess the correlation of serum vitamin D levels with disease activity in ankylosing spondylitis patients.

Method: It was a hospital based cross-sectional study. 50 patients of ankylosing spondylitis and 50 apparently healthy controls were enrolled in study from October 2015 to May 2017. Bath AS Disease Activity Index (BASDAI), Erythrocyte Sedimentation Rate (ESR), C reactive protein, Ankylosing Spondylitis Disease Activity Score (ASDAS), serum 25-hydroxyvitamin D (25OHvitD) were assessed in ankylosing spondylitis patients. Categorical variables were presented in number and percentage and continuous variables were presented as mean±SD. Pearson's and Spearman's correlation coefficient were used to analyze relationship between vitamin D and disease activity.

Result: The patient population studied, had an average age of 31.23±6.34 (mean±SD) years (range 18-45 years). In our study, in group-1 (cases): 37 (74%) cases had Serum 25-OH vitamin D levels<30 nmol/L i.e. vitamin D deficiency. Mean serum levels were 23.04 nmol/L±14.9. In group-2 (controls): 11 (22%) controls had vitamin D deficiency. Mean serum levels were 48.6 nmol/L±24.69. Within group-1, patients with inactive disease (ASDAS<1.3) had vitamin D level were 46.8 nmol/L and moderately active disease (ASDAS 1.3-2.0) had vitamin D level of 25.98 ±8.86 nmol/L, high activity group (ASDAS 2.1-3.5) had 18.21±12.03 and very high activity group (ASDAS>3.5) had 11.18±4.3 nmol/L. Serum 25 OH vitamin D levels showed moderate inverse linear relationship with ASDAS (coefficient of correlation=-0.642) in our study.

Conclusion: Serum vitamin D levels were low in patients of AS compared to normal healthy controls and disease activity of AS inversely correlates with level of serum vitamin D levels.

docgauravsingh@gmail.com

Notes:

Journal of Orthopaedics Trauma Surgery and Related Research
ISSN: 1897-2276

Orthopedics 2018
March 08-09, 2018

Volume 13

Page 37