PREVALENCE OF VITAMIN D DEFICIENCY IN RA PATIENTS FROM CARIRI’S REGION, CEARA

GABRIELA MACEDO Egidio Cavalcante (Estacio - FMJ, Juazeiro do Norte, CE, Brasil), LILIAN SAMARA AQUINO SANTOS (Estacio - FMJ, Juazeiro do Norte, CE, Brasil), PATRICIA ANDRADE MACEDO (Universidade Federal do Cariri - Famed UFCA, Barbalha, CE, Brasil)

BACKGROUND

Rheumatoid arthritis (RA) is a chronic inflammatory joint disease that causes important musculoskeletal changes. As Vitamin D exerts important immunoregulatory functions in our body, it has been a target of an increasing number of publications in recent years, since it has great potential to be an extrinsic factor capable of affecting the prevalence of autoimmune diseases.

MATERIALS AND METHODS

Therefore, the present study proposes to analyze a group of patients with RA, from the region of Cariri-CE, in order to collect data on the prevalence of Vitamin D Deficiency (25OHD3). It is an observational, retrospective and descriptive study based on the evaluation of medical records of patients diagnosed with Rheumatoid Arthritis from a private clinic in Cariri.

RESULTS

The final sample consisted of 109 RA patients. 99 patients (90.8%) were female and 67 (61.5%) were younger than 65 years. Analysis of drug use showed that 94% of patients used conventional DMARDS, being methotrexate the oral drug most used, 76% had used corticosteroids and 36% had used biological DMARDS, specially TNF-inhibitors (62%). Activity analysis, through DAS28 score, demonstrated 40 patients in remission (36.7%) and 69 patients classified with active RA (63.3%). Vitamin D analysis was recruited from blood samples of 73 individuals, demonstrating that 52% had normal levels of vitamin D, 43% had vitamin D between 20-29 ng/mL and 4% had vitamin D deficiency (<20ng/mL). Regarding RA patients with 25OHD3 deficiency, all of them had used corticosteroids for more than 3 months. Regarding RA patients with normal 25OHD3 levels, 65.8% had used corticosteroids for more than 3 months ahead and 10.5% had used it for less than that. The prevalence of densitometric osteoporosis was also evaluated and it came with 42% osteoporosis patients and 14.5% with normal DXA. Regarding RA biological drugs users, 2 patients (7.7%) presented 25OHD3 deficiency and regarding RA high DAS28 active patients, 33% had 25OHD3 deficiency. Nonetheless, between those with DAS28 inferior to 5.1, none of them presented with 25OHD3 deficiency.

CONCLUSION

We present a summary of rheumatoid arthritis patients and Vitamin D levels on a private clinic at Cariri’s region for the first time. The association between deficiency of vitamin D and prolonged use of corticosteroids did not show a plausible correlation, probably because patients who used corticosteroids for more than three months are receiving vitamin D and calcium supplementation. Further studies are needed to better understand the particulars of RA patients in our region.