

Osteoporosis is a frequently encountered medical issue in practice. Several studies in patients with multiple sclerosis (MS) have shown a lower Bone Mineral Density (BMD) when compared to their age matched healthy controls; nonetheless, it has been found to be prevalent in patients with MS and contributes to both morbidity and mortality in this population. We aimed to determine if MS patients are screened and managed for osteoporosis at our facility.

A retrospective chart review of 28 patients between the ages of 45-70 years was conducted. Data collected included gender, MS type, mobility status, falls risk, history of glucocorticoid, smoking and alcohol use and lastly supporting radio graphic evidence; such as x-rays or BMD scan. Other data gathered included Vitamin D level, calcium supplementation and agents used for osteoporosis treatment.

Our cohort was comprised of 26 patients with either primary or secondary progressive MS; 24 of which were Emiratis and the remaining 2 were Arab non-nationals. Falls risk was significant in 19 patients. Wheel chair dependency was found in 10 patients and 7 had limited overall mobility.

All patients were supplemented with Vitamin D. However, only 8 had at least one course of IV Glucocorticoids. BMD scan was performed on 8 patients. Eight patients were diagnosed with Osteopenia/Osteoporosis, out of which 3 were treated with bisphosphonates. Two patients had X-Ray evidence of fractures.

Our findings show limited active participation by neurologists and physicians in general regarding the bone health of this cohort of MS patients. One major limitation of our study is that many of our patients are seen at multiple facilities, which may skew our findings towards the null. In conclusion, we propose that all MS patients should undergo a yearly structured and thorough bone health risk factor evaluation and be treated accordingly.

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Ultraviolet B Radiation Therapy Versus Vitamin D3 Supplementation: Effects on Cognitive Functions and Fatigue in Egyptian Relapsing Remitting Multiple Sclerosis Patients

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Vitamin D independent benefits of ultraviolet B radiation therapy has been previously outlined. The current work aimed to compare the impact of Broadband ultraviolet B radiation (BB-UVB) therapy to vitamin D3 supplementation on cognitive functions and fatigue in relapsing remitting multiple sclerosis (RRMS) patients.

Randomized controlled trial conducted on 40 RRMS patients attending the Kasr Al Ainy hospital multiple sclerosis clinic. Patients were assigned into two equal groups receiving either BB-UVB radiation (3 sessions/week for 4 weeks) or oral vitamin D3 (weekly 50,000 IU for 3 months). Comprehensive cognitive battery [Montreal Cognitive Assessment (MoCA), Symbol Digit Modalities Test (SDMT) and Brief Visuospatial Memory Test-Revised (BVM-T-R)], Fatigue Severity Scale (FSS) and serum vitamin D3 levels were done at baseline and 3 months following either treatments.

Baseline vitamin D3 levels and scores of fatigue and cognitive scales were comparable in both groups. Median scores of MoCA, SDMT, BVM-T-R and FSS pre and post BB-UVB treatment were [27 (3.0)] vs 28.5 (2.0), 33.5 (9.8) vs 37 (10.5), 24 (11.7) vs 32 (6) and 4.4 (1.6) vs 3.2 (2.5)], p-value (<0.001, <0.001 <0.001 and <0.001) respectively, and the median scores pre and post vitamin D3 were [26.0 (2.8) vs 28.0

(2.0), 29.5 (8.3) vs 35.0 (5.0), 27.0 (9.0) vs 31.0 (5.0) and 4.1 (1.0) vs 3.2 (1.2), p-values (<0.001, <0.001 <0.001 and <0.001) respectively. No statistically significant difference was found when comparing both groups post therapies vitamin D3 levels, MoCA, SDMT, BVM-T-R and FSS scores (p= 0.512, p= 0.355, p= 0.779, p= 0.620 and p= 0.758).

Both BB-UVB therapy and oral vitamin D3 supplementation are equally effective in improving cognition and fatigue in RRMS patients.

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Patterns of Complementary and Alternative Medicine Use Among Adult Patients with Multiple Sclerosis: A Cross-Sectional Study

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Multiple sclerosis (MS) is a chronic autoimmune disease that causes demyelination of the central nervous system. No treatment has shown to be completely effective, thus, the tendency for patients with MS to use non-conventional therapies like Complementary and Alternative Medicine (CAM) might increase. The study aims to explore the pattern of CAM use among patients with MS at a tertiary health care center in Saudi Arabia.

This is a questionnaire-based observational cross-sectional study that targeted adult patients diagnosed with MS at a tertiary care center, Riyadh, Saudi Arabia. The study sample size was 176 patients, and consecutive non-probability sampling technique was used to approach them during their appointments. An Arabic validated questionnaire was used to evaluate patients' use of CAM.

The mean age was 34.6 ± 10.9 years, and the majority of patients were females. Eighty-nine percent of the participants reported using CAM at least once. Praying was the most frequent modality (60%), followed by supplication (59%), Ruqia (52%), and vitamins (44%). Symptomatic improvement was reported by 49 (27.8%) of complementary medicine users and 81 (46%) of alternative medicine users.

The study found a high prevalence of CAM utilization among Saudi adult patients with MS exceeding internationally reported rates. Although some patients described some improvement in their symptoms, further research is needed to evaluate the effectiveness of CAM.

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B Cell Over Population Following Alemtuzumab Therapy in a Multiple Sclerosis Patient

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Alemtuzumab is an anti-CD52 monoclonal antibody therapy for relapsing remitting multiple sclerosis (RRMS), which depletes T and B-lymphocytes resulting in their reduction and subsequent repopulation. It decreased relapses compared to interferon beta-1a in clinical trials. However incidence in causing B-cell autoimmunity and hyper-proliferation has not extensively described for CNS involvement.

We report on a 24-year-old female diagnosed with RRMS since 2011 following multiple episodes of optic neuritis and hand tremors. She was started on Natalizumab from an outside facility but developed a relapse. Hence Alemtuzumab was recommended due to fact that