

9th European Congress on

Rheumatology, Autoimmunity and Orthopedics

October 16-17, 2018 | Warsaw, Poland

Frequency of vitamin D inadequacy among Saudi males visiting a rheumatology outpatient clinic of a tertiary hospital in Al Qassim region: Effect of vitamin D supplementation

Hala Lotfy Fayed¹ and Amel Hamdy Saleh²¹Kasr Al Ainy School of Medicine - Cairo University, Egypt²Chemical and Clinical Pathology, KFSHB, Al-Qassim, Saudi Arabia

Background: Vitamin D inadequacy (deficiency and insufficiency) has become an epidemic with the assumption that women in Arab countries are at a higher risk due to their clothing style of wearing dark-colored suits or a veil.

Aim: The aim of the work is to determine the frequency of vitamin D inadequacy among young adult and early middle aged males in Al-Qassim region and to study the effect of vitamin D supplementation.

Patients & Methods: Sixty Saudi males visiting Rheumatology Outpatient Clinic of a tertiary hospital in Al-Qassim region were enrolled and evaluated for musculoskeletal state including assessment of chronic diffuse musculoskeletal pains using Numeric Rating Pain Scale (NRPS) and functional evaluation of lower limb proximal muscle power using chair rise performance test. Serum 25(OH)D was evaluated. Vitamin D supplementation was provided for symptomatic subjects. Follow up clinical evaluation as well as serum 25(OH)D measurement after 12 weeks vitamin D3 supplementation was performed.

Results: The mean age of the patients was 43.2±6.4 years. 54 (90%) had vitamin D inadequacy; 42 (70%) deficiency and 12 (20%) had insufficiency. Significant increase in base line serum 25(OH)D (13.92±5.67 ng/ml) after 12 weeks of supplementation (35.94±4.11 ng/ml) with significant decrease in NPRS (7.42±2.12 vs. 2.06±2.04) ($p < 0.001$), as well as significant improvement of functional status scores of chair rise performance test (93.95±23.56 vs. 203.1±58.6 ($p < 0.001$)).

Conclusion: Vitamin D inadequacy is a major health problem not only in elderly people or women with indoor residency and dark colored clothes, but also in Saudi male young adults in Al-Qassim region.



Figure 1: A flow chart for path of participation throughout the study.

Recent Publications

1. Raji Amin, Sami A Hakim, Hala Fayed, Alaa Khalifa, Fouad Khalil, Mahmoud Khedr and Mohamed Alshafee (2011) Diagnostic Tools for Sensitive Estimation of Renal Function & Early Detection of Lupus Nephritis. AAMJ 9(3).
2. Manal Wilson, Amany A Abou-Elalla, Mervat Talaat Zakaria, Huda Marzouk, Hala Lotfy Fayed and Mariam Onsy F Hanna (2016) Serum amyloid a type 1 gene polymorphism in Egyptian children with familial mediterranean fever. Pathobiology 83(6):295–300.
3. Aml S Nasr, Hanan Darweesh, Engy E L Khateeb, Hala L Fayed, Al-Hussein El-Dakrony (2017) Role of glutathione S-transferases polymorphisms and monocyte CD64 expression in Egyptian patients with systemic lupus erythematosus. Egyptian Rheumatologist 39(3).
4. Hala Lotfy Fayed and Amel Hamdy Saleh (2017) Frequency of vitamin D inadequacy among Saudi males visiting a Rheumatology Outpatient Clinic of a tertiary hospital in Al-Qassim Region: Effect of vitamin D supplementation. The Egyptian Rheumatologist 39(4).

5. Samia Fadda, Nermeen Khairy, Hala L Fayed, Heba Mousa and Radwa Taha (2017) Interstitial lung disease in Egyptian patients with rheumatoid arthritis: Frequency, pattern, and its correlation with various clinical manifestations and anti-citrullinated peptide antibodies level. The Egyptian Rheumatologist 40(3).

Biography

Hala Lotfy Fayed is a Lecturer of Rheumatology and Rehabilitation, Kasr Al Ainy School of Medicine; Cairo University and has her expertise in research issues related to autoimmune rheumatic diseases as well as metabolic bone diseases. She works at Kasr Al Ainy School of Medicine which is a research and teaching hospital, affiliated with the faculty of Medicine. She has passion in improving health and wellbeing. Her open and contextual work aims for improving healthcare. She has built this model after years of experience in research, evaluation, teaching and administration both in hospital and education institutions.

halafayed@yahoo.com

Notes: