HPR Patients' perspectives, functioning and health (descriptive: qualitative or quantitative)

POS1583-HPR THE EFFECT OF VITAMIN D DEFICIENCY ON EXERCISE CAPACITY, RESPIRATORY MUSCLE STRENGTH, AND PERIPHERAL MUSCLE STRENGTH IN PATIENTS WITH CONNECTIVE TISSUE DISEASES

Keywords: Vitamin D, Systemic sclerosis, Systemic lupus erythematosus

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Background: Vitamin D is one of the fat-soluble vitamins and is also a group of sterols that are hormone and hormone precursors. Vitamin D deficiency and/or insufficiency have been found to be associated with many chronic diseases, including cancers, metabolic syndrome, and autoimmune diseases. Vitamin D is involved in modulation of immune responses in autoimmune disorders including multiple sclerosis, asthma, diabetes mellitus, connective tissue disorders such as rheumatoid arthritis (RA) or systemic lupus erythematosus (SLE). In addition; Previous studies conducted in other patient populations indicate that higher vitamin D levels are related to higher exercise capacity, muscle strength, and better lung function.
Objectives: The purpose was to investigate the effects of vitamin D deficiency on exercise capacity, respiratory muscle strength, and peripheral muscle strength in patients with connective tissue disease (CTD).
Methods: This cross-sectional observational study included CDT (SLE and systemic sclerosis (SSc)) patients and healthy participants. Serum 25(OH)D, calcium, and phosphorus levels were measured and Vitamin D levels 10.0-20.0 ng/mL defined insufficiency and levels <10.0 ng/mL defined deficiency. The exercise capacity, respiratory muscle strength, and peripheral muscle strengths were set as the primary outcomes of the study. Secondary outcomes included evaluation of physical activity, dyspnea, pain, emotional status, fatigue, and quality of life.
Results: There were 23 SLE (36.82±10.06), 21 SSc (44.38±14.63), and 24 healthy controls (37.62±11.74). Compared to healthy controls, CTD groups with vitamin D deficiency had significantly lower respiratory muscle strength ($p<0.001$), peripheral muscle strength (knee extension and shoulder flexion) ($p<0.05$), exercise capacity ($p<0.05$), physical activity ($p<0.05$), and quality of life ($p<0.05$) while having significantly more dyspnea ($p<0.001$), pain ($p<0.001$), fatigue ($p<0.001$), anxiety, and depression ($p<0.05$).
Conclusion: The results of our study indicate that vitamin D deficiency is associated with reduced muscle strenghts and related symptoms and complaints in CTD patients, hence, in order to increase the efficacy of rehabilitation and treatment programs, attention should be paid to vitamin D levels and should be corrected appropriately.

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POS1584-HPR IMPACT OF TELEMEDICINE ON DISEASE ACTIVITY ASSESSMENT: A CASE-CROSS OVER NESTED WITHIN A COHORT OF SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS

Keywords: Systemic lupus erythematosus, Outcome measures, COVID

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Background: The utilization of telemedicine has been rapidly growing among patients with rheumatic disease especially following COVID-19 pandemic. The ease and convenience seems to dominate the reasons of such growth. Yet the effect of this approach on patients with systemic lupus erythematosus (SLE) is yet to be revealed.
Objectives: In this study, we aimed to examine the effect of telemedicine in SLE patients on the outcome of disease activity.
Methods: This is a case-cross over study nested within the national prospective cohort of SLE, Saudi Arabia. SLE patients who fulfils the SLICC classification criteria within the period between March 2020 to March 2021 and have been assessed at three-time point with three months' time difference between assessments according to standardized protocol were included. Telemedicine was conducted at first point while in person assessment were used for second and third points. Primary outcome was difference in SLEDAI-2K score. Primary analysis was conducted using GEE model and adjusted for potential confounders including demographics, medications and changes in steroid doses. Several sensitivity analyses were conducted to mitigate selection and time varying confounders.
Results: A total of 92 participants were included. Majority of them were females (88%), with a mean (±SD) age of 36 (±13). mean (±SD) disease activity scores at baseline as follows: SLEDI 5 (±5); SRI 3.8 (±3.5); SDI 1 (±1). Mean difference of SLEDI score of -1.641 (95% CI -2.773 — -0.510), p=0.005* between telemedicine and follow up visits. Adjusted value and mean with mean diffrence in Figure 1. Results were consistent in all sensitivity analyses.
Conclusion: We found that the Telemedicine assessment was associated with much higher disease activity score compared to in person in subsequent assessments which may suggest potentially overestimation of disease activity and later assessment accuracy. Cautious adoption is suggested in SLE patients with active disease.

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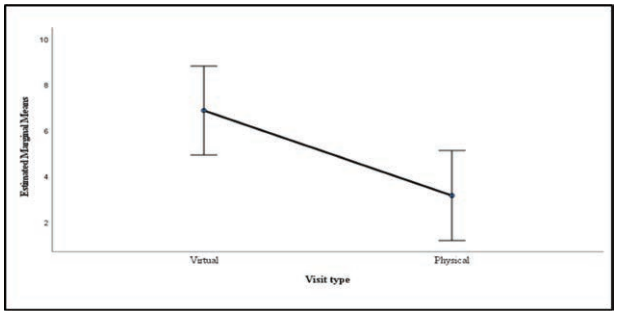


Figure 1 Repeated measure analysis of difference in SLEDAI between the virtual visit and the physical visit taking factors affecting SLEDAI on univariate analysis into consideration (abnormal urine test, fibromyalgia, haemolytic anaemia and mycophenolate use).

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Disclosure of Interests: None Declared.
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POS1585-HPR "SO, MEN WILL BE ABLE TO RECEIVE #METHOTREXATE FOR LUPUS AND RHEUMATOID ARTHRITIS BUT NOT WOMEN" THE OVERTURN OF ROE V. WADE BEYOND ABORTION

Keywords: Qualitative research methods, Pregnancy and reproduction, Quality of life

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