Proper management of these conditions will allow for greater independence and better health for the elderly.
Implications: It is important to identify, intervene and treat individuals with vitamin D deficiency or increased depressive symptoms to reduce these risk factors and improve the survival of the elderly.
Keywords: Depressive symptoms, Vitamin D deficiency, Mortality

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SWALLOWING FUNCTIONALITY IN SEVERE DEMENTIA: CASE SERIES

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Background: Dementia is a degenerative neurological syndrome, characterized by the presence of cognitive decline and/or behavioral changes that impact the functionality of the individual. The presence of dysphagia, change in swallowing, in the elderly with dementia can cause dehydration, malnutrition and respiratory infections, and can lead to death. This leads to an unfavorable prognosis, increasing the length of hospital stay and health expenses. The literature reports that, through the clinical evaluation of swallowing, it is possible to verify its functionality, classify the severity of dysphagia and collect information that helps in the understanding of the case and prognosis.
Objectives: To verify the functionality of swallowing in the elderly with severe dementia. It has a secondary objective to describe the sample and its clinical characteristics.
Methods: A case series was carried out through consultation of secondary data. The study took place at a Reference Center for Health Care for the Elderly in the Federal District, between September 2017 and December 2019. The following data were collected: age, sex, type of dementia, medical diagnoses, and functional classification of swallowing, which was defined after the patients underwent clinical evaluation. The functionality of swallowing was classified into normal, functional swallowing, mild, moderate, or severe dysphagia.
Results: The participants were five women and three men. The average age was 82.62 $\pm$ 6.23. All had a diagnosis of dementia, according to the criteria of the National Institute of Neurological and Communicative Diseases and Stroke - Alzheimer's Disease and Related Disorders Association and a 3-point score in the CDR (Clinical Dementia Rating). Four individuals had a diagnosis of vascular dementia, three (37.5%) Alzheimer's Disease and only one (12.5%) mixed dementia.

Four individuals (50%) had systemic arterial hypertension, three (37.5%) sleep disorders, three (37.5%) history of stroke, two (20%) depression, two (20%) hypothyroidism, two (20%) behavioral disorder, two (20%) dyslipidemia. Other conditions observed: postural instability, sphincter incontinence, asthma, osteoporosis and heart disease. At the time of the clinical evaluation of swallowing, five patients (62.5%) had dysphagia, three of whom were severe, one was moderate and the other mild. Two (20%) had normal swallowing, and one (12.5%) had functional swallowing.

Conclusion: Clinical evaluation was shown to be effective in identifying dysphagia in elderly people with dementia. However, through the objective assessment of swallowing, through imaging exams, it is possible to verify aspects that cannot be observed through clinical evaluation. Therefore, future studies may add objective assessment as a complementary evaluation and assist in the conclusion of the speech-language diagnosis.
Implications: There is a need for better management of dysphagia, including its evaluation with a reliable method, avoiding its underdiagnosis. There is a need for action at the three levels of health care. The results of this study can contribute to the construction of these actions.
Keywords: Elderly, Insanity, Dysphagia

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Ethics committee approval: This study was approved by the Ethics and Research Committee of the Universidade de Brasília, with the number 3.121.872.

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FUNCTIONAL CAPACITY IN INDIVIDUALS WITH SPONDYLOARTHRITIS ACCORDING TO THE PHYSICAL ACTIVITY LEVEL

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Background: Spondyloarthritis (SpAs) constitutes a group of chronic inflammatory rheumatic diseases that affect the axial and peripheral skeleton, with pain and joint stiffness. There is evidence that individuals with SpA have worse functional capacity than healthy individuals. It is known that functional capacity can be influenced by the low physical activity level, but this relationship has not yet been fully established in these individuals.
Objectives: Evaluate functional capacity in individuals with spondyloarthritis according to physical activity level.
Methods: This is a cross-sectional study, with a non-probabilistic convenience sample. Individuals with a diagnosis of SpA, aged between 18 and 69 years, in follow-up at the Outpatient Care of the University Hospital Maria Aparecida Pedrossian and who agreed to participate in the research made up the spondyloarthritis group (SG, n=28) and were evaluated for their aerobic capacity (Chester Step Test); muscle strength (5-repetition Sitting and Standing Test - TSL); functional balance (Timed Up and Go Test - TUG). Furthermore, physical activity level was assessed by counting steps/day using a pedometer during seven consecutive days (first and last days were excluded from the steps/day average calculation). The control group (CG, n=25) was composed of individuals without rheumatic disease and submitted to the same evaluation. Statistical analysis: Student-test or Mann-Whitney and analysis of covariance (ANCOVA, covariate: count of steps/day).
Results: The groups were homogeneous in terms of age and sex. Aerobic capacity ($p<0,001$) was lower in the SG than in CG, while the time to perform TSL ($p<0.001$) and TUG ($p<0.001$) was greater in the SG than in CG. The physical activity level assessed by the pedometer was lower in the SG than in CG (EG: 5677 $\pm$ 3664; CG: 8309 $\pm$ 2513 steps/day; p=0.004). Through analysis of covariance, it

was observed that physical activity level significantly interferes with the evaluated functional capacity variables.
Conclusion: Individuals with SpA have worse functional capacity than healthy individuals, which may be, at least in part, a result of the lower level of physical activity.
Implications: From this study, it is suggested that physiotherapists and other health professionals include in their conduct the encouragement of physical activity regular practice for individuals with SpA, not only in the context of Primary Care, but also in the outpatient setting, with the aim to attenuate or prevent the deleterious effects of a sedentary lifestyle on functional capacity.
Keywords: Rheumatology, Fitness Trackers, Exercise Test

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VISUAL ASSESSMENT WITH COMPUTATIONAL TOOL IN INFANTS EXPOSED TO GESTATIONAL COVID-19: CROSS-SECTIONAL STUDY

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Background: Current literature has shown that COVID-19 during pregnancy can have a negative impact on maternal-fetal clinical outcomes, including miscarriages, preterm birth, and increased mortality (MEDEIROS et al., 2021; YANG et al., 2020). More recently, an association was demonstrated between the experience of the pandemic and a higher risk of delay in the development of fine motor skills and communication in 1-year-old children (HUANG et al., 2021). In adults, multiple neuro-ophthalmological manifestations have been described in association with COVID-19: visual field defects, optic nerve dysfunctions, eye movement abnormalities and nystagmus (GOLD; GALETTA, 2021). These findings raise concerns about the risks that gestational COVID-19 may bring to healthy vision development in children. However, these visual outcomes have been little explored in this age group so far, leading to difficulty in the early diagnosis of these conditions. With this, there remains a scientific gap on the risks in the visual development of the child population exposed to the coronavirus.
Objective: To evaluate fixation on the horizontal visual tracking in children of mothers exposed to gestational COVID-19.
Methods: This is a cross-sectional study. The evaluator did a stimulus 25cm from the child's face with the optotype with a figurative face from the Visual Battery by Ricci in horizontal visual tracking. The response was filmed with a camera to capture the near-infrared spectrum, and the filming was processed by software developed for temporal facial mapping and iris movement. Visual fixation was analyzed in the videos of horizontal visual tracking processed by the software by 2 independent researchers who classified the visual fixation as unstable ($<$3s) or stable ($\geq$3s) and recorded its total time. Statistical analysis was performed using the Statistica® 13.0 software, with a description in mean$\pm$SD. Between groups, the t-test was applied with $p<0.05$.
Results: The study included 15 infants separated into 2 groups, the COVID group with 7 participants, and the Control group with 8 participants. The sample showed birth weights of 3198$\pm$398 grams, and 1824$\pm$1040 grams, and gestational age of 38$\pm$1 weeks, and 33$\pm$5 weeks, in the COVID and Control groups, respectively. Unstable visual fixation was found in 14% of the COVID Group and 38% of the Control. The total fixation time was: 9.42 seconds $\pm$6.32 (COVID), and 4.62 seconds $\pm$3.11 (Control); however, it was not statistically significant (p=0.07).
Conclusion: Gestational COVID-19 has not been shown to influence stable fixation and total visual fixation time in infants.
Implications: The results of the study show that the coronavirus pandemic has had a smaller impact on the visual development of infants, which can be associated with mitigation measures and vaccination of the population.
Keywords: Eye movements, Premature birth, Vision screening

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USABILITY AND FEASIBILITY OF IMMERSIVE VIRTUAL GAMES IN THE TREATMENT OF PEOPLE WITH PARKINSON'S DISEASE

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Background: Parkinson's disease (DP) is a chronic, neurodegenerative, and progressive disease that affects the central nervous system, compromising motor and cognitive functions, which impact quality of life and activities of daily living. Physiotherapy has explored virtual reality games as a therapeutic modality in neurorehabilitation through exergames, which are games that require body movement. However, there is still no consensus regarding the selection of immersive virtual reality (RVI) exergames aimed at training upper limbs (MMSS), making it necessary to explore innovative and immersive approaches.
Objectives: This study aimed to evaluate the feasibility and usability of selected exergames in Quest 2, prioritizing cognitive and motor aspects aimed at upper limbs in individuals with PD.
Methods: This is a quasi-experimental longitudinal clinical trial to assess the usability and feasibility of RVI games using Quest 2 in individuals with DP. A sample of 10 people diagnosed with DP, stable in relation to dopaminergic medication, in stages I to III of the Hoehn & Yahr classification, between 40 and 85 years old, with normal or corrected visual and auditory acuity and a minimum education of 4 years of formal study. 4 games were carefully selected: FIT-XR, Fruit Ninja VR, Beat Saber and Final Soccer. The interventions took place in two sessions with an interval of 30 minutes between them.