

Methods: This is a qualitative and descriptive study, taking the case study as a guiding model, developed from ethnographic analysis resources. The study was developed with the association of three data collection strategies: document analysis, direct observation with conversational approaches and interviews with CER physiotherapists in the state of Paraíba-PB, data analysis was performed through the reconstruction of scenes, articulating the elements captured in the data production process.

Results: The study reveals that there are weaknesses in the organization of the work of physiotherapists in the CER in question, and that these have an impact on the way work is conducted and provided to people with disabilities, noting that improvements and adjustments are needed in the organization of work in issues such as: promoting strategies that bring the physiotherapist closer to practices such as welcoming, favoring moments between the physiotherapist and the multidisciplinary team for assessments in an integrated manner and articulation with other points of the care network for people with disabilities, stimulating and organizing strategies to strengthen and include shared care in the sector, and implement strategies such as team meetings and the execution of the Singular Therapeutic Project.

Conclusion: Knowledge of the facilitators and obstacles in the organization of the physiotherapists' work allowed identifying the weaknesses present in the service, which distances these professionals from providing assistance from the perspective of the biopsychosocial approach to CER users, and verifying the aspects that contribute to the distance between work prescribed by the Rehabilitation Instruction, and how the work is performed at the study site.

Implications: Understanding the organization of the work of physiotherapists in health services is still a scarce task in the field of research, so this work raises this debate in the field of physiotherapy. In addition, its results can become important elements for a better understanding of the management of the work of these professionals in the centers and perhaps produce changes in the organization and work process of physiotherapists in the CER.

Keywords: Physiotherapy. Work. Rehabilitation Centers

Conflict of interest: The authors declare no conflict of interest.

Acknowledgment: Thanks to FAPESQ/CNPq for the financial incentive for scientific research through PPSUS 05/2020.

Ethics committee approval: Research Ethics Committee of the Federal University of Paraíba, CAAE: 37347020.3.0000.5188).

<https://doi.org/10.1016/j.bjpt.2024.100943>

358

6-MINUTE WALK TEST EVALUATION WITH CARDIAC AUTONOMIC CONTROL IN WOMEN WITH SYSTEMIC SCLEROSIS

Nathália Alves de Oliveira Saraiva¹, Iasmim de Oliveira Farias¹, Brenda Mesquita dos Santos¹, Agnaldo José Lopes^{1,2}

¹ Postgraduate Program in Rehabilitation Sciences, Centro Universitário Augusto Motta (UNISUAM), Rio de Janeiro, Rio de Janeiro, Brazil

² Postgraduate Program in Medical Sciences, Faculty of Medical Sciences, State University of Rio de Janeiro (UERJ), Rio de Janeiro, Rio de Janeiro, Brazil

Background: Systemic sclerosis (SSc) is a complex immune-mediated connective tissue disease characterized by progressive fibrosis due to collagen deposition. In the heart, all structures can be affected, with inflammation, oxidative stress, vascular damage and fibrosis. However, the main underlying mechanism seems to be microcirculation impairment, with abnormal vasoreactivity due to autonomic nervous system (ANS) dysfunction. In fact, ANS

dysfunction in SSc patients is associated with a risk of arrhythmias and mortality, in addition to being an early marker of SSc progression that can help identify subclinical involvement and precede the occurrence of cardiac fibrosis. The six-minute walk test (6MWT) is a simple, inexpensive, easy-to-administer, well-tolerated, safe, non-invasive, and reliable submaximal test. In SSc, the 6MWT has been increasingly used to assess performance during exertion and as a follow-up tool and primary measure of outcome and response to therapy.

Objectives: To evaluate the associations between sympathetic-vagal balance and exercise measured by the 6MWT in women with SSc without cardiac involvement.

Methods: This was a cross-sectional study in which 69 women with SS [median age 51 (40–63) years] without cardiac involvement underwent the 6MWT. Throughout the 6MWT, heart rate variability (HRV) was evaluated using specific software.

Results: The median six-minute walk distance (6MWD) was 451 (392–498), with 29 (42%) participants not achieving 80% of the predicted value. Desaturation during the 6MWT ($SpO_2 \leq 4\%$) was observed in 10.1% of participants. Significant correlations were observed between the 6MWD and the following HRV parameters: number of interval differences of successive NN intervals greater than 50 ms ($r_s = -0.397$, $p = 0.013$), low-frequency range ($r_s = 0.374$, $p = 0.023$), high-frequency range ($r_s = -0.372$, $p = 0.023$), and parasympathetic nervous system index ($r_s = -0.342$, $p = 0.045$). No significant correlation was noted between delta peripheral oxygen saturation and HRV parameters.

Conclusion: In women with SSc, there is an interrelationship between the 6MWD and both vagal withdrawal and sympathetic hyperactivation. This relationship between autonomic imbalance and worse exercise performance could potentially increase cardiovascular risk, even in patients without apparent cardiac involvement.

Implications: People with SS may be involved of the cardiovascular system which, even subclinical, can potentially have an important impact on functional capacity. In this sense, HRV analysis is a powerful non-invasive tool to access the sympathetic and vagal modulations of the heart, in addition to being simple to apply and widely available. Control of the autonomic nervous system of the heart could be a potential target in the treatment of SSc patients. Thus, drug and non-drug approaches that reduce sympathetic hypertonia and prevent parasympathetic withdrawal should be considered to counteract autonomic dysfunction in SSc.

Keywords: Systemic sclerosis, Exercise, Autonomic nervous system

Conflict of interest: The authors declare no conflict of interest.

Acknowledgment: Not applicable.

Ethics committee approval: UERJ Ethics and Research Committee under number CAAE: 02794918.100005259

<https://doi.org/10.1016/j.bjpt.2024.100944>

359

VARIABILITY OF 6-MINUTE WALK DISTANCE IN PATIENTS WITH INTERSTITIAL LUNG DISEASE ASSOCIATED WITH DIFFUSE CUTANEOUS SYSTEMIC SCLEROSIS

Nathália Alves de Oliveira Saraiva¹, Iasmim de Oliveira Farias¹, Brenda Mesquita dos Santos¹, Agnaldo José Lopes^{1,2}

¹ Postgraduate Program in Rehabilitation Sciences, Centro Universitário Augusto Motta (UNISUAM), Rio de Janeiro, Rio de Janeiro, Brazil

² Postgraduate Program in Medical Sciences, Faculty of Medical Sciences, State University of Rio de Janeiro (UERJ), Rio de Janeiro, Rio de Janeiro, Brazil