the presence or absence of pain. The density and texture of the soft tissues adjacent to the occipital region (suboccipital muscles) and C1-C4 and T5-T9 vertebrae (paravertebral muscles) were assessed by palpating the soft tissues immediately lateral to the spinous processes of the vertebral column and the occipital bone. Asymmetry of the occipital and vertebral (C1-C4 and T5-T9) regions was assessed as follows: for the occipital region, the evaluator, with their fingers placed on the occipital bone, determined if one side was more posterior than the other. For the C1-C4 and T5-T9 segments, the evaluator located the transverse processes of the cervical and thoracic vertebrae and identified posteriority through palpation. Vertebral mobility of C1-C4 was assessed by evaluating two main movements, lateral flexion, and vertebral rotation. For vertebral mobility of T5-T9, rotational movements of the vertebrae were investigated.
Results: The GG exhibited greater restriction in lateral gliding and left rotation mobility at the vertebral levels between C2 and C4 and T6 and T9, as well as increased pain (at C3 to C4 and T7 to T9), muscle tension (at all levels), and vertebral asymmetry (at C2 to C4 and T7 to T9) compared to the GC, with a significance level of $p<0.05$.
Conclusion: Individuals with chronic gastritis showed reduced left-sided vertebral rotation mobility in the cervical and thoracic spine, as well as decreased left-sided vertebral lateral gliding mobility in the cervical region. Additionally, they exhibited increased pain at the spinous process, right-sided vertebral transverse process asymmetry, and increased muscle tension adjacent to the right-sided vertebrae in the thoracic and cervical regions, compared to healthy individuals.
Implications: It is of paramount importance to investigate the relationships between the viscera and the musculoskeletal system, as it can help prevent potential associated musculoskeletal dysfunctions and promote a more comprehensive alternative treatment through osteopathy, chiropractic, or other approaches.
Keywords: Gastritis, Posture, Range of motion

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FINE MANUAL DEXTERITY OF CHILDREN WITH AUTISM SPECTRUM DISORDER AND WITH TYPICAL DEVELOPMENT THROUGH IDADI

Thays de Paula Barbosa Machado Chagas[1], Ana Carolina Sales Medeiros[1], Elisandra Marques Ferreira[1], Gabriela Louise Bragança de Aquino[1], Maurício Oliveira Magalhães[1]
[1] *Master's Program in Human Movement Science (PPGCMH), Federal University of Pará (UFPA), Belém, Pará, Brazil*

Background: Autism affects 1 in every 160 children in the world. It is estimated that there are about 2 million people within the spectrum in Brazil. Its diagnosis is based on the presentation of the disorder, since there is no biological marker, which led to the emergence of numerous international instruments for screening and more assertive diagnosis. In Brazil, the use of these instruments is limited by translation, validation, psychometric quality and by the large geographic dimension that can, for example, generate different motor repertoires among children of the same age group due to the great diversity between the regions of the country. So far, only one study used the Dimensional Inventory of Child Development Assessment (IDADI), created in Brazil, to assess fine motor skills in children with Autism Spectrum Disorder (ASD), but without including the population of the northern region of Brazil.
Objectives: To compare the fine motor skills of children with ASD and those with typical development using the Dimensional Inventory for Child Development Assessment.
Methods: This is a descriptive and observational study with a cross-sectional design developed in Pará. Data collection was carried out by four researchers online or in person, divided into two groups: children with ASD and children with typical development. The instrument uses the parental report of mothers or other family members of daily contact with the child who had a clinical diagnosis (in all degrees) of Autistic Spectrum Disorder determined by a licensed professional (psychologist or physician), and the age group was used between 24 and 72 months. The group of typically developing children were in the same age group and scored less than 15 on the Social Communication Questionnaire, indicating no risk of ASD. For the assessment of fine motor skills, the standardized score of the IDADI fine motor domain was used.
Results: 66 children participated in the study, 22 diagnosed with ASD and 44 with Typical Development. A significant difference was observed comparing the fine motor skills of children with ASD (69.5 ± 19.6) with children with TD (98.2 ± 19.0), with statistical difference between groups ($p<0.0001$), with large effect size ($d=1.48$).
Conclusion: We carried out the analysis of fine motor skills in child development through the Dimensional Inventory of Child Development Assessment, created in Brazil, comparing children with TD and ASD, and our results confirmed that children with ASD have significantly lower scores than typical children when compared fine motor skills between children with ASD and with typical development.
Implications: Motor abnormalities are usually the first sign of atypical development in ASD and can be detected before social and language disorders, being able to significantly affect other aspects of child development. In addition, impaired fine motor skills can be predictors of ASD severity, making detection essential to enable effective interventions for this population.
Keywords: Autistic Spectrum Disorder, Motor Skills, Motor behavior

Conflict of interest: The authors declare no conflict of interest.
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CAPACITY OF PHYSICAL AND NON-PHYSICAL CHARACTERISTICS IN PREDICTING OBJECTIVE FUNCTION OF WOMEN WITH PATELLOFEMORAL PAIN

Théo Muniz de Souza Borges da Silva[1], Vitoria Ozores Perez[1], Marina Cabral Waiteman[1], Helder dos Santos Lopes[1], Ronaldo Valdir Briani[1], Fábio Mícolis de Azevedo[1]
[1] *Sao Paulo State University (UNESP), School of Science and Technology, Physical Therapy Department, Presidente Prudente, São Paulo, Brazil*

Background: Patellofemoral pain (PFP) is a chronic musculoskeletal disorder characterized by an insidious and diffuse pain around and/or behind the patella. People with PFP have decreased levels of physical activity and muscle strength of the knee extensors, as well as higher levels of pain, kinesiophobia, and body mass index (BMI).