



Online Perspectives Journal: Biological & Health Proceedings of the 5th Research & Development PROVIC/PIBIC Seminar 2nd CNPq Scientific Initiation Meeting Vol. 10, N° 34, Supplement, 2020 DOI: 10.25242/8868103420202150

## The treatment of idiopathic scoliosis of adolescents through specific exercises: a narrative review

<u>Andrea Medeiros de Brito Sá</u><sup>1</sup>, Ana Luiza de Araujo Rodrigues<sup>2</sup>, Ana Luiza França Crispim<sup>2</sup>, Carlos Eduardo dos Santos Júnior<sup>2</sup>, Patrícia Junqueira Ferraz Baracat<sup>3</sup>

(1)Scientific Initiation Student at PROVIC - Physiotherapy Course; (2) Collaborating Researchers - Laboratório de Fisioterapia Neuromuscular Esquelética – LAFINNE/ISECENSA; (3) Guiding Researcher - Neuromusculoskeletal Physiotherapy Laboratory – LAFINNE/ISECENSA – Physiotherapy Course- Higher Education Institutes of CENSA - ISECENSA, Rua Salvador Correa, 139, Centro, Campos dos Goytacazes, RJ, Brazil

Scoliosis is a three-dimensional deformity of the spine, of unknown etiology, which affects mainly adolescents in the growth spurt phase. Its prevalence is approximately 0.47 to 5.2% and it is higher in the northern hemisphere. It is characterized by an imbalance in the longitudinal axis determined by an inclination in the frontal plane, rotation in the axial plane and poster flexion in the sagittal plane. It appears in "S" or "C" shape, and can progress faster leading to aesthetic, functional, respiratory and in quality of life. The standard diagnosis is made by measuring the Cobb angle on the X-ray from the upper and lower limits of the most inclined vertebra. The identification of early signs of scoliosis favors its treatment and prevents progression of curves. The conservative approach through scoliosis specific exercises with or without a complement to the orthosis is intended for patients with curvature of 10° - 45°, beyond this angulation is indicated surgery. Brazil remains in need of deepening and dissemination of the latest scientific evidence for the treatment of scoliosis. This work will consist of a literature review based on Pubmed, Lilacs, Cochrane Library databases. Randomized controlled trials conducted between 2015 and 2020 and published in English will be selected. It is expected that from the comparison between the effects of scoliosis specific exercises it will be possible to identify the methods of best result for clinical practice.

Keywords: Scoliosis. Posture. Physiotherapy. Postural deviation. Exercises.

Supported by: ISECENSA.