CORE STABILITY

Chapter

2

Ecem ERSUNGUR¹ Nazan ÖZTÜRK²

Introduction

The word core is an English word that means central and core (1). Panjabi (1992) described it as the capacity of the stabilization system to protect the intervertebral neutral region within the core stability. (2) Akuthota and Nadler (2004) stated that it was the power-house that started the grove, arm and leg movement (3). Core stability was born in the late 1990s (4,5). The term core is used to refer to the trunk or more specifically the lumbopelvic region of the body. Stability of the lumbopelvic region is very important in maintaining the movement of the upper and lower extremities, in supporting loads and in protecting the spinal cord and nerve roots (2,4,5,6). Contribution of core muscles to stability is related to their ability to perform flexion, lateral flexion and rotation movements and to control external forces that cause extension, flexion, and rotation. Ensuring core stability to produce strength and prevent injury is possible because the trunk muscles have sufficient strength and endurance (7). The stability of the spine allows the simultaneous development of arm and leg strength; therefore, the better the spine stability in terms of movement performance, the greater the power production in the arms and legs (8). Cor also plays an important role in daily biological functions. It creates the internal organ pressure in the abdominal cavity, holds the internal organs in place and helps to remove air from the lungs (9).

Core Region

It is known as the functional center of the kinetic chain of the spine. Pelvic floor muscles in the lower base of the body, the upper base of the diaphragm, the anterior group are formed by the abdominals, the posterior support is formed by the gluteal and paraspinal muscles (33,35). Cores that provide core stability

Lecturer; Adnan Menderes University, Söke Health Services Vocational School, Health Care Services Department, At-Home Patient Care Program, Aydın-Turkey. ecem.ersungur@adu.edu.tr

Lecturer; Adnan Menderes University, Söke Health Services Vocational School, Health Care Services Department, At-Home Patient Care Program, Aydın-Turkey. nazanozturk@adu.edu.tr

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