Establishing the biomechanical properties of the *pubovisceralis* muscle in women without pathology and with pelvic organ prolapse

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ABSTRACT

The biomechanical assessment of the pelvic floor tissues is important to understand pelvic dysfunctions and also to improve clinical outcomes. The decreased elasticity of the tissues often causes an inability to maintain the normal positions of the pelvic organs [1-2]. Urinary incontinence (UI) and pelvic organ prolapse (POP) are the most common pathologies, which can be associated with inadequate biomechanical properties of the supportive structures such as muscles, ligaments or pelvic fascia. Several risk factors exist, such as hormonal changes, vaginal delivery, aging, among others [3].

The aim of the present work is to obtain distinct values for the elasticity of the pelvic floor muscle, between women with POP and women without pathology. For this purpose, we used a non-invasive methodology, using computational models coupled with information acquired by Magnetic Resonance Imaging (MRI).

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