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FEMALE PELVIC CAVITY FINITE ELEMENT MODEL FOR PELVIC DISORDERS STUDY

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Female pelvic floor disorders are medical conditions that affect about 25% of women and its prevalence increases with age [1], [2]. These dysfunctions, which include the pelvic organ prolapse and urinary and fecal incontinence, are associated to the pelvic cavity support structures’ degradation, such as ligaments, muscles and fasciae. The causes associated to this degradation are aging, intense sport practice, hormonal changes and vaginal delivery [3]. Through numerical simulations is possible to understand how damaged tissues affect the pelvic cavity as a whole. The objective of this work is to create a complete three-dimensional model of the female pelvic cavity in order to study its biomechanical behavior, in healthy and dysfunctional situations, through numerical simulations. With this model is possible to study several pelvic floor dysfunctions and their treatments.

