

# Physiotherapy to Prevent and Treat Women with Uterine Prolapse

Barros Danielly Xavier<sup>1</sup>, De Sá Josefa Nicole Arruda Gomes<sup>1</sup> and Gilly Daphne<sup>2\*</sup>

<sup>1</sup>Student of the Faculdade de Integração do Sertão-FIS, Brazil

<sup>2</sup>Professor of the Faculdade de Integração do Sertão-FIS, Brazil

\*Corresponding author: Gilly Daphne, Student of the Faculdade de Integração do Sertão-FIS, Serra Talhada-PE, Brazil



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## ABSTRACT

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## Introduction

Pelvic Organ Prolapse (POP) is a condition in which the pelvic floor organs move partially or completely from their normal position and move towards the genital hiatus, as a result of weakness and / or stretching of the muscles and ligaments that act in the support of these organs [1]. In this case, it is common for patients to feel heaviness and vaginal discomfort, especially during sexual intercourse, in addition to urinary incontinence [2]. Physiotherapy is qualified as a conservative treatment, promoting behavioral therapy and muscle strengthening techniques in a non-invasive way, through specific exercises for the pelvic floor, promoting greater support for the pelvic viscera [3,4]. Given the above, this review aimed to assess the effectiveness of Physiotherapy as a way of preventing and treating women who have uterine prolapse.

## Methods

This is a mini narrative review, which inclusion criteria were: randomized clinical trials or quasi- randomized clinical trials that addressed Physiotherapy as a way of preventing and treating uterine prolapse of women, without linguistic restriction, between the years 2009 to 2021. The selection of articles was conducted at the Scielo, Lilacs and PubMed databases, using descriptors in Portuguese and in English ('uterine prolapse', 'physical therapy',

'prevention', 'treatment'). Studies that did not use Physical Therapy interventions and/or did not attend to the inclusion criteria were excluded from this review.

## Results and Discussion

After searching the databases and crossing keywords, 141 articles were found, of which only 7 were included, as they met the inclusion criteria. The most used modalities in the included studies were Pelvic Floor Muscle Training through Kegel Exercises, Functional Electrostimulation and Vaginal Cones (Table 1) [5-11]. The treatment of patients with pelvic organ prolapse should always be individualized [12], respecting the levels of muscle strength, motor coordination and structural changes in the pelvic floor that can interfere in the rehabilitation process [11,12]. Most of the studies included in this review used physiotherapeutic techniques with training of the pelvic floor muscles, associated or not with other resources. It was possible to demonstrate that such exercises promote muscle re-education, with increased strength, tone and protein synthesis, in addition to decreasing the degradation of muscle fiber proteins<sup>10</sup>, improving proprioception, coordination and motor learning through increased perineal awareness and adequate understanding of the mechanics of contraction [5,11,12].

**Table 1:** Data extraction table for the included studies.

Author, Year	Sample	Intervention	Results
Dreher et al. (2009) [5]	Case report, a 60-year-old woman with a history of vaginal delivery and complaints of stress urinary incontinence.	A protocol of exercises with vaginal cones was performed at the patient's home three times a week, twice a day.	Absence of urinary loss due to increased strength of the pelvic floor muscles, improving body awareness [5].
Hagens et al. (2009) [6]	47 women attended in the gynecology sector with prolapse grade I and II.	Women received gynecological care, with pelvic floor contraction and relaxation exercises and guidance.	Physical therapy exercises showed improvement in prolapse symptoms [6].
Santos et al. (2009) [7]	45 pre-menopausal women with symptoms of stress urinary incontinence.	Vaginal cones ranging from 20 to 100g, performing the treatment in two stages. 1- Voluntary contraction of the patient; 2- 15 minutes with the patient in motion.	The result was satisfactory in the treatment of urinary incontinence and in the prevention of prolapse, avoiding surgical treatment [7].
Bernardes et al. (2012) [8]	At the beginning of the study, 63 women	The protocol of daily exercises at home for GI included three sets of 8-12	The strength and area of the levator ani muscle increases
	participated, divided into three groups (GI, GII and GIII) of 21 each. At the end of the study, 58 women remained, due to some exclusion factors.	contractions of the AP in different positions, of 6-8 seconds each. GII consisted of 10 repetitions of 3 to 8 seconds. The GIII received instructions to contract the AP muscles during increases in abdominal pressure.	significantly with physiotherapy AND hypopressive exercises in women with pelvic organ prolapse [8].
Knorst et al. (2012) [9]	48 women aged between 35 to 78 years, with symptoms of UI and pelvic prolapse.	Kegel exercises (15 minutes once a week for 15 minutes). Functional Electrostimulation (10 minutes once a week for 15 minutes).	There is a significant increase in muscle strength, improving perineal tone and increased understanding of the mechanics of perineal Contraction [9].
Guimarães E Araujo, (2015) [10]	14 women aged 20 to 35 years, employees at a University.	Kegel exercises (10 interventions, for 20 minutes, three times a week. The exercises were performed on a stretcher where the women were in the supine position and their knees were flexed, making sustained contractions of the pelvic floor).	The final evaluation of the patients' PERFECT had a significant 5% increase in pelvic floor muscle strength compared to the initial PERFECT evaluation [10].
Lopes et al. (2017) [11]	99 women from 37 to 77 years old who had pelvic dysfunction.	A pelvic floor rehabilitation program (PRAP) was applied, consisting of three daily series of fast and slow contractions. - which had contraction time and twice the relaxation time.	The Program has shown positive results with improvements in the symptoms of urinary incontinence, anal incontinence and pelvic

Subtitle: PERFECT = Pelvic Floor Muscle Assessment by PERFECT Scheme

## Conclusion

The rehabilitation programs used by the authors, with specific exercises for the muscles that involves the pelvic viscera, with or without the aid of associated resources such as functional electrostimulation and vaginal cones, suggest that those physical therapy techniques promote an overall strengthening of the pelvic floor. In addition, the training of the pelvic floor muscles establishes a narrowing of the pelvis openings, making the organs sustained by these muscles protected against possible prolapse, especially when there is an increase in abdominal pressure.

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Gilly Daphne. Biomed J Sci & Tech Res



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