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Lifting Beyond Surgery: Conservative Management of Stage III Pelvic Organ Prolapse with Remote Pelvic Floor Muscle Training — Case Report and Narrative Review

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Abstract

Introduction: *Pelvic organ prolapse (POP) impairs daily function and quality of life in many women. Pelvic floor muscle training (PFMT) is recommended as first-line conservative management, yet research on telehealth-based interventions for moderate-to-severe POP remains limited.*

Methods: *This case report describes a 47-year-old woman with stage III POP who underwent an eight-week remotely supervised PFMT protocol, combined with systemic and topical hormonal therapy. A narrative review was also conducted using studies and guidelines published between 2019 and 2025 addressing conservative POP treatment and telehealth-delivered PFMT.*

Results: *The patient demonstrated improvement in bulge sensation, pelvic pressure, and pelvic floor muscle control, maintaining clinical stability after reduction in session frequency. The literature consistently supports PFMT as effective for symptom improvement, with emerging studies indicating that remotely supervised PFMT may offer results comparable to traditional in-person care, provided that structured assessment, progression, and adherence monitoring are applied.*

Conclusion: *This case suggests that remote PFMT may be a feasible and effective conservative option for selected patients with stage III POP, potentially reducing the need for early surgical intervention. Future research with larger cohorts is needed to clarify the long-term impact of tele-rehabilitation on anatomical outcomes and to establish standardized protocols for remote assessment, exercise prescription, and follow-up.*

Keywords: Pelvic Organ Prolapse, Pelvic Floor Muscle Training, Telehealth, Conservative Therapy Physiotherapy.

Brief Summary

A remotely supervised PFMT program improved symptoms in a woman with stage III POP, suggesting tele-rehabilitation may be an effective conservative option pending larger studies.

Introduction

Pelvic organ prolapse (POP) is defined as the descent of pelvic organs into or beyond the vaginal canal, frequently leading to vaginal bulge, pelvic heaviness, urinary or fecal dysfunction, and sexual discomfort. It affects up to 40% of parous women

and constitutes a major contributor to pelvic floor morbidity and surgical demand worldwide. While surgery remains the definitive option for advanced symptomatic POP, conservative interventions — especially PFMT and pessary use — are endorsed as first-line management by major guidelines such as NICE NG123 and IUGA [1, 2]. Traditionally, PFMT has been conducted in person by specialized physiotherapists, but telehealth and telerehabilitation have rapidly expanded, improving access and continuity of care [6, 7, 12].

The clinical effectiveness of remote PFMT in POP remains under investigation, particularly for advanced stages. This report presents a case of stage III POP managed primarily through a structured remote PFMT protocol and provides a narrative review contextualizing these findings within current literature.

Materials and Methods

Case Report

A 47-year-old woman (weight 62 kg; height 1.62 m) was diagnosed with stage III POP using the Pelvic Organ Prolapse Quantification (POP-Q) system. Her history, symptoms, and prior treatments were collected through teleconsultation. She completed an eight-week supervised remote PFMT program guided by a specialized pelvic floor physiotherapist via video calls and digital logs. The rehabilitation program followed is detailed in Table 1.

Table 1: Rehabilitation schedule detailing the progression of session frequency and treatment intensity over the study period.

Period (MM/DD–MM/DD)	Frequency	Notes
07/27 – 08/27	7×/week	Daily remote sessions
08/27 – 09/10	5×/week	Reduced due to fatigue
09/10 – 10/01	3×/week	Maintenance phase

Exercises consisted of three sets of up to 15 maximal voluntary contractions (held to fatigue tolerance, typically up to a self-count of "1005"), with relaxation intervals between contractions. Pharmacologic therapy (initiated on 04/09) included transdermal estradiol, cyclic oral progesterone, vitamin D, and topical vaginal estrogen cream. No pessary or surgical procedure was used. The study was approved by the local institutional ethics committee and conducted in accordance with the principles of the Declaration of Helsinki, and written informed consent for publication was obtained.

Narrative Review Strategy

We conducted a narrative review via PubMed, Cochrane Library, and guideline databases (NICE, IUGA, AUGS), covering publications from 2019 to 2025. Search terms included “pelvic organ prolapse,” “pelvic floor muscle training,” “telehealth,” “telerehabilitation,” and “conservative treatment.” Priority was given to systematic reviews, randomized controlled trials (RCTs), and clinical guidelines discussing PFMT outcomes and telehealth-based interventions [3–12,14–16].

Results

Case Outcome

The patient reported a progressive decrease in vaginal bulge sensation and pelvic pressure during the intervention. Her awareness and control of pelvic floor contractions improved substantially. Throughout the program, images were recorded during teleconsultations, always in the same position and while performing a Valsalva maneuver, demonstrating a gradual reduction in the prolapse and ultimately showing complete resolution by the end of the intervention (Figures 1–4). After tapering the frequency of sessions, symptom stability was maintained. There were no adverse events. Unfortunately, objective reassessment by POP-Q or imaging was not performed post-intervention due to the remote nature of the treatment — a significant limitation of this report. Nonetheless, the images recorded during teleconsultation clearly show that the prolapse was substantial at baseline and was unlikely to have been less than stage III.

Findings from the Narrative Review

Systematic reviews and RCTs demonstrate that PFMT significantly improves POP symptoms and in some cases can reduce prolapse stage by approximately one grade in selected patients [3–5]. Hagen et al. showed that individualized PFMT for women with POP reduced symptom severity and improved quality of life compared to standard care, and these findings were reinforced by Braekken et al. and Frawley, who reported that PFMT might even reverse mild prolapse [17]. Dekker emphasized the preventive role of PFMT, while Fenocchi et al. described sustained benefits and cost-effectiveness in long-term follow-up. Recently, evidence has emerged that telehealth-based PFMT yields outcomes comparable to in-person therapy in terms of symptom improvement and adherence [6, 7, 12]. Karhu et al. confirmed that telehealth is effective for pelvic health physiotherapy, improving access and continuity.

Discussion

This case reinforces that supervised remote PFMT can provide meaningful symptomatic relief even in stage III POP, supporting conservative management as a feasible option before resorting to surgery. Our findings align with large RCTs demonstrating the efficacy of PFMT in reducing POP symptoms and improving function [17]. The addition of teleconsultation into pelvic floor physiotherapy expands access to evidence-based conservative care, particularly in settings with geographically limited specialized services or where patients face logistical barriers. Telehealth also offers advantages such as reduced travel costs, flexible scheduling, and continuity of care — all of which are essential for long-term adherence in pelvic floor rehabilitation. However, successful implementation depends on patient digital literacy and appropriate therapist training in remote assessment and feedback techniques.

From a physiological standpoint, PFMT enhances levator ani support and modulates intra-abdominal pressure distribution, which contributes to improved pelvic organ stabilization [3-5]. When combined with hormonal therapy (as in our case), improvements in connective tissue quality may potentiate outcomes. Limitations of this case include the lack of objective post-treatment anatomical assessment (POP-Q or imaging), short follow-up, and the confounding effect of hormonal therapy. Despite these, the sustained symptom control observed suggests that remote PFMT

under structured supervision can be a safe and effective strategy to delay or avoid surgery in selected patients.

Clinical Implications

Tele-rehabilitation should be integrated into pelvic floor physiotherapy services as a validated adjunct or alternative to traditional care. It may particularly benefit patients in remote areas, those awaiting surgery, or those seeking non-surgical options for quality-of-life improvement.

Future Perspectives

We call for well-powered RCTs to compare remote versus in-person PFMT, define optimal training dosage, and assess long-term anatomical outcomes. The integration of digital biofeedback devices and wearable sensors could further enhance monitoring, engagement, and personalization of telehealth protocols.

Conclusion

A structured, remotely supervised PFMT program in a woman with stage III POP was associated with significant symptom improvement and increased functional awareness. This supports remote physiotherapy as a viable conservative management option that may delay or prevent the need for surgery. Tele-rehabilitation, when delivered under appropriate supervision, is a safe, accessible, and cost-effective extension of pelvic health physiotherapy. Further research should refine these protocols, validate long-term anatomical outcomes, and optimize patient selection.

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