

Peer Review File

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Reviewer A

General comments

This is an interesting systematic review on the effectiveness of PFMT in treating or managing post-prostatectomy incontinence. However, I have highlighted a number of concerns regarding the methods used to conduct the systematic review that I hope can be addressed and have focused my comments on these.

Abstract

Background, line 23: When you are discussing the “therapeutic effect” of pelvic floor muscle training, do you mean managing stress urinary incontinence or treating stress urinary incontinence?

Reply: Thank you for your comment. It means “managing stress urinary incontinence”.

Changes in the text: Paragraph 1 / Abstract

Results, line 32: Please change “quality evaluation” to “risk of bias assessment”.

Reply: Thank you for your comment. We have modified it.

Changes in the text: Paragraph 3 / Abstract

Results, line 39: Please describe what subgroup analysis was conducted for additional clarity.

Reply: Thank you for your comment. We only conducted subgroup analysis on ICIQ-SF, so the results of this section are written together.

Changes in the text: None

Introduction

The background discusses RP for prostate cancer but not other potential prostatectomy methods or reasons for undergoing prostatectomy (e.g., benign prostatic hyperplasia). What is the rationale behind this, particularly as the inclusion criteria for the review appears to be all forms of prostatectomy?

Reply: Thank you for your comment. Prostatectomy is mostly used for anterior lacrimal

gland cancer, and is relatively rare for men with severe urinary symptoms and severe prostate enlargement, so it is not specifically described separately.

Changes in the text: None

Lines 65-66: “If PFMT fails, surgical treatment should be considered.” I am not sure that this particular detail is relevant to the review given that the focus is on the effects of PFMT.

Reply: Thank you for your comment. Not relevant, we are only introducing the content related to PRMT. We have deleted it.

Changes in the text: Paragraph 2/ Introduction

Lines 69-70: “a 2015 study did not recommend it as a first-line rehabilitation...” This references the 2004 version of the Cochrane review. In addition, there is a more recent Cochrane review, published in 2023, which examines the effects of conservative interventions including PFMT for managing urinary incontinence following prostate surgery: <https://doi.org/10.1002/14651858.CD014799.pub2>

Reply: Thank you for your comment. We have corrected it to 2004, but the Cochrane review for 2023 is PFMT plus biofeed back versus no treatment.

Changes in the text: Paragraph 3/ Introduction

Methods

The GRADE approach has not been used to assess the certainty of the evidence in the meta-analyses, as would be considered good practice. What is the rationale behind not undertaking GRADE assessments?

Reply: Thank you for your comment. When selecting literature, we have already selected literature with high homogeneity, and the heterogeneity between the included literature in different outcome indicators is relatively low because GRADE grading has not been performed.

Changes in the text: None

Subgroup analyses are mentioned in the abstract and the results but are not described in the Methods. Please clarify.

Reply: Thank you for your comment. We have clarified the description of subgroup analysis in the methods.

Changes in the text: Paragraph 6/ Methods

Literature retrieval: Please provide the full search strategies for all databases as

supplementary material or an appendix.

Reply: Thank you for your comment. We have provided it.

Changes in the text: appendix

Literature retrieval: Was any citation chaining of included studies or relevant systematic reviews conducted to find any relevant articles that might have potentially been missing from the searches?

Reply: Thank you for your comment. We tracked the references of the included literature and possibly related Systematic review.

Changes in the text: None

Inclusion criteria: Please clarify what types of prostatectomy were eligible for the review.

Reply: Thank you for your comment. Prostatectomy is generally used for prostate cancer, which is rare among others, and the focus is on postoperative Urinary incontinence, because the primary disease has not been differentiated.

Changes in the text: None

Inclusion criteria, line 93: Please clarify what is meant by “regular or intensive” PFMT.

Reply: Thank you for your comment. There are differences in exercise intensity, and the criteria for judging intensity are not uniform among different literature, so we will not distinguish them here. We have deleted it.

Changes in the text: Paragraph 2/ Methods

Inclusion criteria, line 94: What is the rationale behind including regular exercise as placebo as the only comparator to PFMT?

Reply: Thank you for your comment. Because in the literature on PFMT, routine exercise is the most common control group.

Changes in the text: None

Inclusion criteria, line 95: Patient-reported outcome measures are defined as a 1-hour or 24-hour pad test but would these not usually be considered clinician-reported measures of incontinence? Please clarify.

Reply: Thank you for your comment. Yes, this is the evaluation method used in the articles we included.

Changes in the text: None

Exclusion criteria, line 102: What is the rationale behind excluding conference papers and abstracts? This could be considered a limitation of the review.

Reply: Thank you for your comment. Although there is outcome data for conference papers and abstracts, it is difficult to evaluate articles due to incomplete information on literature quality evaluation and intervention measures. Meta-analysis needs to include the original data and exclude the overview.

Changes in the text: None

Exclusion criteria, line 103-104: Please clarify what you are considering to be a combination with another intervention. Arguably, some of the studies included within the review examine PFMT in combination with other interventions and might not be considered eligible (e.g., Glazener 2011 also uses biofeedback and bladder training as required).

Reply: Thank you for your comment. We exclude combined drug intervention or other combined measures that have a greater impact on PFMT. What Glazener 2011 mentioned is that biofeedback is not routinely used, and physicians can use it at their discretion, so we did not rule out the literature.

Changes in the text: Paragraph 3/ Methods

Exclusion criteria, line 105: What was considered to be important missing data? Were any attempts made to contact authors to obtain these data?

Reply: Thank you for your comment. For example, the data is displayed in a graph, and the original data cannot be obtained. We did not contact the original author.

Changes in the text: None

Literature searching and data extraction: Was any software used to help facilitate the screening process? If so, please reference this here.

Reply: Endnote

Changes in the text: None

Literature searching and data extraction: Was the screening process outlined conducted at both title and abstract stage and full-text?

Reply: Thank you for your comment. The literature retrieval was carried out in the title and abstract stage and the full text stage, and the data extraction was only carried out after the inclusion of the literature was determined.

Changes in the text: None

Literature searching and data extraction: Please expand on the methods used for data extraction. For example, how many researchers undertook data extraction and how were any conflicts resolved? Was the data extraction form piloted?

Reply: Thank you for your comment. The table was developed in advance, and 2

researchers extracted according to the table. In case of any disagreements, a third researcher made the final decision. Yes, for example, whether a certain outcome indicator is included. This is mentioned in the fourth paragraph of the method.

Changes in the text: None

Literature quality evaluation: Please can you rename this section “Risk of bias assessment” as RoB1 has been used for the critical appraisal process.

Reply: Thank you for your comment. We have modified it.

Changes in the text: Paragraph 5 / Methods

Literature quality evaluation: Please include a reference for RoB1 and the Cochrane Handbook.

Reply: Thank you for your comment. We have added the reference.

Changes in the text: Paragraph 5 / Methods

Literature quality evaluation: Please describe how the risk of bias assessments were undertaken. For example, how many researchers undertook risk of bias assessments and how were any conflicts resolved?

Reply: Thank you for your comment. 2 researchers. In case of any disagreements, a third researcher made the final decision. This is mentioned in the fourth paragraph of the method.

Changes in the text: None

Statistical analysis, line 124: What was the rationale behind using odds ratios as the summary statistic instead of risk ratios when odds ratios have a tendency to overestimate the size of the effect in RCTs (see <https://pubmed.ncbi.nlm.nih.gov/25746068/>)?

Reply: Thank you for your comment. In this paper, RR is used for repeated calculation, and the conclusion is not different.

Changes in the text: None

Statistical analysis, lines 125-127: Please explain the rationale behind the thresholds used to detect heterogeneity in the meta-analyses. Are they based on published literature and, if so, can this be cited?

Reply: Thank you for your comment. The Cochrane Handbook provides a rough standard, if $P \geq 0.1$ and $P \leq 50\%$ is the threshold used in most of the literature.

Changes in the text: None

Statistical analysis, line 129: Funnel plots were generated but it is usually recommended

that these are only generated if a meta-analysis has 10 or more studies included in it. However, the largest meta-analysis in the review contains nine studies. I am therefore not convinced that generating funnel plots is methodologically sound.

Reply: Thank you for your comment. Yes, funnel plots are generally used in more than 10 articles, but we only have 9. We can only make a rough assessment and add the Egger test.

Changes in the text: Paragraph 3,4,5,6 / Results

Results

Quality evaluation of the included literature: Examining Figure 2 and Figure 3, I am surprised that more studies are not judged to be at unclear high risk of bias across most domains, particularly for the blinding domains. What is the rationale behind this?

Reply: Thank you for your comment. We check the conclusion according to the ROB1 entry in the Cochrane manual.

Changes in the text: None

Table 1

Glazener 2011: The MAPS study is composed of two different trials in two different but relevant populations. Given this, why is it only represented once in this table and the meta-analyses when two different trials were conducted in MAPS?

Reply: Thank you for your comment. We only use a set of data.

Changes in the text: None

Operation: Please be more specific about the type and approach to prostatectomy taken. While I appreciate that Oh 2020 has been labelled as robot-assisted prostatectomy, indicating whether RP, TURP or another approach was undertaken would be useful for the reader.

Reply: Thank you for your comment. This article does not distinguish between surgical procedures, and because different literature on the definition of exercise intensity is not uniform, so there is impossible to distinguish. We deleted the statement about strength.

Changes in the text: Paragraph 3 / Methods

In the Methods – Inclusion criteria, it is noted that both regular or intensive approaches to PFMT were eligible for the review. It may be useful to indicate which of the trials used regular PFMT and which used intensive.

Reply: Thank you for your comment. Because different literature on the definition of exercise intensity is not uniform, so there is impossible to distinguish. We deleted the statement about strength.

Changes in the text: Paragraph 3 / Methods

Reviewer B

Please check the text - there are several tipfellers as in line 139 - after after

Reply: Thank you for your comment. We have deleted it.

Changes in the text: Paragraph 1 / Results

An interesting meta-analysis on an important topic that I think is well covered, please just check the text because I found some tipfellers - see above.

Reviewer C

1. 139 – After 2x – correct

Reply: Thank you for your comment. We have deleted it.

Changes in the text: Paragraph 1 / Results

2. The grouping blind method of 4 studies was not used after being unclear, the blind method of subjects and 148 researchers of 4 studies was not used after being unclear, and the blind method of measurement of 5 research results was unclear or not used. – not clear sentence – repeating?

The results of RP depend on a number of factors, from the type of surgery (open, lap., robotic) the surgeon experience, NVB status, to mention only a few of them that are considered the most important.

Therefore, it is difficult to have a clear conclusion about their effectiveness.

Reply: Thank you for your comment. We have modified it.

Changes in the text: Paragraph2 / Results

Reviewer D

Liping Xin and co-authors presented a meta-analysis entitled: The therapeutic effect of pelvic floor muscle training on stress urinary incontinence following prostatectomy: a meta-analysis. The topic is very interesting and important because the number of

patients undergoing radical prostatectomy is constantly growing. Despite the constant increase in knowledge about the anatomy and functional aspects of the urinary continence mechanism, as well as the improvement of surgical techniques (RARP), a significant percentage of patients experience postoperative urinary incontinence. The role of PFMT is still undefined and the conclusions of the conducted research are ambiguous. The above definitely justifies the need for a meta-analysis.

The authors should be commended for their work. The manuscript is well written, well-structured and all rules for this type of manuscript are followed. Well-chosen literature. balanced discussion.

The article requires only minor editorial and linguistic corrections (repetition).

[Reply: Thank you for your comment. We have improved the language.](#)

[Changes in the text: full text](#)

Reviewer E

This is a thorough, updated systematic review and meta-analysis of the therapeutic effect of pelvic floor muscle training on stress urinary incontinence following prostatectomy. The authors appropriately followed the PRISMA guidelines and found that early outcomes of PFM retraining (at 1-6mo) were significantly improved, longer term support is lacking.

Would consider adding whether or not this SR was entered into a systematic review registry. Would further qualify discussion and conclusions to reflect this analysis demonstrates efficacy of PFM retraining to significantly reduce post prostatectomy incontinence at <1 year for post prostatectomy SUI. Further, would expand more in discussion on why this may be true (other than lack of studies).

[Reply: Thank you for your comment. This part has been modified accordingly.](#)

[Changes in the text: Paragraph 3 / Discussion](#)

Reviewer F

The article presents a meta-analytic review that assesses the therapeutic effect of pelvic floor muscle training on stress urinary incontinence after prostatectomy. However, the authors have not registered their meta-analysis, which is a significant methodological error.

During the meta-analysis, they excluded 10 articles due to inaccessibility. The term "inaccessible" refers to articles that were not available for retrieval or inclusion in the

study. This could be due to various reasons such as unavailability of full text, restricted access, or language barriers.

It is mentioned that there was significant heterogeneity among the included studies, and a random-effects model was used in such cases. It would be beneficial to investigate possible sources of heterogeneity, such as differences in study design, participant characteristics, and pelvic floor muscle training protocols. Additionally, conducting a sensitivity analysis to assess the impact of individual studies on the overall results would be recommended.

Regarding publication bias assessment, although it is mentioned that publication bias was evaluated using funnel plots, specific details about the evaluation methodology are not provided. It would be desirable to employ more rigorous methods, such as formal statistical tests (e.g., Egger's test), to quantify and evaluate publication bias more precisely.

While the results of the meta-analysis are presented in terms of odds ratios (OR) and mean differences (MD), a meaningful clinical interpretation of the observed effects is not provided. It would be useful to discuss the clinical relevance of the observed effect sizes and their impact on clinical practice, as well as consider the magnitude of differences in relation to clinically significant outcomes.

I hope this email finds you well. I have carefully reviewed your manuscript titled "The Therapeutic Effect of Pelvic Floor Muscle Training on Stress Urinary Incontinence After Prostatectomy: A Meta-Analytic Review" (Manuscript ID: [ID]), and I would like to provide you with detailed feedback and suggestions to further enhance the quality and impact of your study.

Firstly, it is essential to address the methodological error of not registering your meta-analysis. I strongly recommend registering your study to ensure transparency and adherence to proper research practices. This step will also enhance the credibility of your findings.

[Reply: Thank you for your comment. We have re-registered \(ID: 442960\).](#)

[Changes in the text: None](#)

Regarding the exclusion of 10 articles during the meta-analysis due to inaccessibility, I kindly request you to provide clarification on what you mean by "inaccessible." Providing specific details, such as reasons for exclusion (e.g., unavailability of full text, restricted access, language barriers), would improve the reproducibility and transparency of your study selection process.

[Reply: Thank you for your comment. Because these 10 articles are not publicly available, the full text cannot be downloaded and obtained.](#)

[Changes in the text: None](#)

Additionally, the significant heterogeneity among the included studies mentioned in your article warrants further investigation. I suggest exploring potential sources of heterogeneity, such as differences in study design, participant characteristics, and pelvic floor muscle training protocols. Conducting a sensitivity analysis to assess the impact of individual studies on the overall results would also strengthen the robustness of your findings.

Reply: Thank you for your comment. We have added sensitivity analysis and Egger's test.

Changes in the text: Paragraph 3,4,5,6,8 / Results

In terms of publication bias assessment, although you mention the use of funnel plots, specific details regarding the evaluation methodology are lacking. I encourage you to employ more rigorous methods, such as formal statistical tests (e.g., Egger's test), to quantify and evaluate publication bias more accurately.

Reply: Thank you for your comment. We have added sensitivity analysis and Egger's test.

Changes in the text: Paragraph 3,4,5,6,8 / Results

Furthermore, while you present the results of the meta-analysis in terms of odds ratios (OR) and mean differences (MD), it is crucial to provide a meaningful clinical interpretation of the observed effects. I recommend discussing the clinical relevance of the observed effect sizes and their implications for clinical practice. Considering the magnitude of differences in relation to clinically important outcomes would provide valuable insights.

Reply: Thank you for your comment. We have modified it.

Changes in the text: Paragraph 4 / Abstract and Paragraph 1 / Conclusions

Lastly, I encourage you to suggest future research directions to strengthen and confirm the findings of your study. Given the limited number of included studies, providing more specific recommendations regarding the direction of future research and the clinical importance of your current findings would further contribute to the field.

Reply: Thank you for your comment. We add it in the conclusion.

Changes in the text: Paragraph 1 / Conclusions

Thank you for considering my feedback on your manuscript. Addressing these points will significantly improve the quality and impact of your study.