Peer Review File

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Reviewer A Comments

Comment 1: How did you calculate the required sample size. I would consider this a pilot study.
Reply 1: This study was indeed a pilot study designed to inform subsequent, larger-scale study. The smaller size was based on this study type and also because of the long-term nature of this study (12-month PFPT program) that is more involved for our study team. Although a pilot study, our recruitment goal was also informed by our separately published experience comparing in-person PFMT supervised by an FPMRS-trained specialist with standard post-operative rehabilitation pathway (unsupervised pelvic floor exercises supervised by treating surgeon). This study included 20 men in each arm and demonstrated statistically significant differences in validated SUI score, thus supporting the number recruited for this study.
Changes in the text: Our introduction describes this study as a pilot study. We have also detailed this in the materials and methods.

Comment 2: You started PFMT 3 weeks after surgery, what was the reason?
Reply 2: We begin formal PFMT 3 weeks after surgery to allow ample time for catheter removal and recovery from painful complaints that can impede effective PFMT. Similarly, we do not want early PFMT to exacerbate post-operative pain. Finally, our questionnaire evaluation at 3-weeks is an attempt to capture continence nadir as, in our experience, incontinence is commonly most severe in the several weeks following catheter removal. PFMT thus begins directly after this.

We agree that when to start PFMT and how long to continue is of interest and not clearly defined. The AUA Guideline details the uncertainty surround the effectiveness of pre-RALP PFMT as other studies have shown no benefit (in contrast to PFMT that is largely show to be beneficial and recommended in AUA Guideline). As detailed in the text, we do introduce them to the materials prior to surgery so that they can familiarize themselves with the exercises and proper contraction. That said, formal scheduled PFMT begins at 3 weeks.
Changes in the text: We have added detail to the materials and methods on page 8 to detail the reasoning behind 3-week assessment.

Comment 3: How long does an internet program take on an average day?
Reply 3: It averages 20 minutes. This is detailed in line 175.

Comment 4: Please refer to the following texts.
Reply 4: Thank you for providing these reports. We have included suggested text by Anan et al.

Consistent with our response below (Reviewer B, Comment 1), we find the report by Chang less meaningful. As Chang et al point out, there is no consistency in the definition of continence across the included studies, with the majority using definitions that we would define as incontinence (1PPD; <2g 24-h pad weight). Indeed, "two studies did not describe the definition of urinary continence" at all. Further, the duration of the PFMT programs are not defined and this is of critical importance as we believe (and have reported) that long-term PFMT is important to demonstrating durable differences in continence rates. Accordingly, while we appreciate the systematic analysis, we believe that it is more helpful to cite specific studies in our manuscript such that we can compare like programs and make more accurate conclusions.
Changes in the text: We have included suggested text by Anan et al.

Comment 5: Could you get a record of the program participants' viewings; could you know what the participation rate was; Is it possible to get individual feedback.
Reply 5: The online program is open access so it is not possible to electronically track viewing rate etc (as opposed to if the program was closed to login access). Detailed qualitative assessment was not part of the study protocol although we did include several questions regarding ease of use that are presented.
Changes in the text: None.

Comment 6: Have there been any differences in efficacy between the internet program and the previous face-to-face program?
Response: See Reviewer B Comment 1.

Comment 7: RALP is mentioned in the text without a full spell description. Robotic radical prostatectomy is also used. Please spell out and unify.
Reply 7 and changes in the text: Thank you. We have made the suggested changes (line 139, 159).

Comment 8: A diagram showing the flow of the internet program over time would be helpful.
Reply and changes made: Thank you. The program calendar provides the most detailed description of program components over time. We have included supplemental figure to include this and also directed people to the online site where the program calendar is available in entirety.

Reviewer B Comments

Comment 1 (and Reviewer A comment 6, and Reviewer C comment 1): Why did you choose a single arm study? It is generally known that 80% to 90% of patients with UI after RALP acquire urinary continence by 1 year after surgery and authors state that rate of improvement is similar to other reported series. A comparison between oPFMT/PFE and face-to-face PFMT is essential to verify the effectiveness.

Reply all. We very much appreciate the comments and the opportunity to respond to the important issues raised.

First, we respectfully disagree with the statement that "it is generally known that 80% to 90% of patients with UI after RALP acquire urinary incontinence by 1 year after surgery". Unless the definition of continence is mild incontinence. This has been the focus of much of our research and advocacy as well as others in the FPMRS community. Continence is a term that means absence of any incontinence. Despite that, varying definitions of continence are common in reported literature that are not consistent with what we consider true continence (such as social continence, commonly used to define 1 PPD or less). Even 0 PPD is not necessarily continence as many of these men leak but choose not to wear a pad. Indeed, many studies don't even report true continence rates, rather reporting mean validated questionnaire scores. Reports that use a strict definition of continence show much lower continence rates than 80-90%. Our own reported series demonstrated the 20% of patients undergoing RALP and a standard post-operative rehabilitation program were completely dry at 1 year. We believe that in order to truly optimize functional outcomes after RALP, we (the urologic community) first need to be open about the true outcomes that men experience after surgery. This is particularly important given the increasing number of CaP survivors.

Second, it is critical to define what we mean when we say PFMT. PFMT is delivered by a formally trained professional, generally a pelvic floor therapist. In that sense, PFMT is indeed demonstrated to benefit continence status following RALP. We do not consider sporadic pelvic exercise education delivered by the treating prostatectomist (unless formally trained in PFPT) to be PFMT. We consider this rather to be a standard post-operative rehab pathway (pelvic floor education). And we do not consider this to be as efficacious. Our own reported experience has supported this, demonstrating superior outcomes with formal PFPT.

Despite this, the vast majority of men undergoing RALP receive standard post-operative rehab due to many barriers such as therapist availability, scheduling constraints, etc. Therefore, it is critical that we address these barriers and try to improve access to true PFMT. One option is to attempt to provide true PFMT virtually and this is the purpose of this effort and study. This program was created by a pelvic floor therapist and urologist to approximate the care for formal PFMT. Much like many research endeavors, this is a step-wise long-term effort and analysis. Our first previously detailed report sought to compare formal in-person PFMT with standard rehab and demonstrated superior results with in-person PFMT. The second step is to assess an alternative delivery model for PMFT. This is a pilot project and thus necessary to again do this in phases, beginning with a single arm feasibility study. Accordingly, this phase allows us to generally assess whether patients can and do use the program, identify interface difficulties, and generally assess preliminary outcomes or adverse events. Doing it in this fashion was also the guidance of the scientific oversight and COI committee. The third phase of this effort will indeed be a comparison with formal

PFMT at 12-month follow-up. It is in that phase that we will assess whether online PFMT is non-inferior to in-person PFMT (which in turn we have previously shown is superior to standard post-op rehab). If so, this would suggest that our program could serve as a tool for urologists to use that might provide a better option that their standard counseling when in-person PFMT by a therapist is not an option. We look forward to presenting those results when available.
Changes made: We have added significant detail through the manuscript (introduction, materials, discussion) to provide this narrative such that our longer-term effort and phased approach is detailed for the audience.

Comment 2: Although it states that IIEF is also evaluated, it is not mentioned in the results or discussion.
Reply and changes made: Thank you for identifying this. Sexual function was not a primary outcome of this prospective analysis and we have removed that detail from the material and methods. PFMT has not been shown to widely influence ED rates after RALP. While we collected this data as part of larger analysis, we will need to analyze in retrospective fashion.

Comment 3: It would be good to evaluate whether dietary therapy has had an impact.
Reply 3: We agree. This assessment is part of the subsequent 12-month comparative evaluation.

Comment 4: Compliance rate was 76% … would be a better report if it could be compared with face-to-face PFMT.
Reply 4: We agree that comparative study is needed as per Comment 1. Given 5 patients who did not begin the program following enrollment, the compliance rate is 81%. That said, once patients started the program, 100% were compliant with therapy and did so through 12-months. Given our experience with PFPT compliance at large in both men and women, we find this notable.

<u>Reviewer C Comments</u>

Comment 1: It is already known that "regular PFMT" provide improvement of continence after RALP. At least 2 arms are needed.
Response: See Reviewer B Comment 1.

Comment 2: What was the experience of the surgeon who performed RALP? How many patients got BNV preservation? These can affect outcome.
Reply 2: RALPs were performed by 3 surgeons. They are all experienced, fellowship trained surgeons that treat patients as part of the UVA comprehensive cancer center, one of 54 centers in the US given this designation by the NCI.

Detailed information regarding nerve sparing is provided in Table 1, with 81% undergoing bilateral nerve sparing RALP. We agree that this variable can influence continence. We have also separately reported our experience evaluating this (Hutchison

et al. Predictors of urinary outcomes following robotic-assisted laparoscopic prostatectomy. BJUI Compass, 2023. https://doi.org/10.1002/bco2.248). In this study, nerve sparing was not found to be an independent predictor of SUI outcomes.
Changes in the text: Detail is added to the methods to elaborate on surgeon experience.

Reviewer D Comments

Comment 1: The study has two main drawbacks – and the authors refer to them in the discussion – namely the small number of participants and the lack of a control group.
Reply 1: We agree. See Reviewer B Comment 1 please.

Comment 2: the lack of numbering of the list of references makes it impossible to properly evaluate citations.
Reply 2: We are unclear as to this comment. Our references are numbered. We are not sure whether there was some technical issue that the TAU site had in providing our manuscript to the reviewer as submitted.

Reviewer E Comments

Comment 1: Please consider the relevance or improvements to the Supplemental Figures.
Reply 1 and changes made: Thank you. Consistent with Reviewer A, Comment 8, we have added Supplemental Figure 1 to provide more detail regarding the program flow. Supplemental Figure 2 has been suggested by others as important to provide overview of dietary modification materials. While the entire program is accessible online to all readers, including some examples has been suggested as important. Finally, we feel that Supplemental Figure 3 is important so that readers clearly understand our outcomes, as these items focused on patient experience and satisfaction are non-validated items as opposed to the other validated instruments used in this study that can be accessed via the citations.