Urinary Incontinence: evidence on conservative management

Incontinência Urinária: evidências na abordagem conservadora

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ABSTRACT
Urinary incontinence in women is a condition of high incidence and is associated with an impact on quality of life. Conservative treatment modalities are an important resource in the management of this condition, since they can be prescribed based on the clinical diagnosis without the need for additional tests. The present study aims to gather current evidence on conservative treatment modalities available for female incontinence published in the last 5 years. Conducting the search in the Medline and LILACS databases, 28 articles were identified, categorized with level of evidence 1b and 2b by the Oxford classification, which present original results on physical therapy, medication and behavioral modalities in the non-community treatment of female incontinence. The current state of the art demonstrates a domain of studies with a high degree of evidence involving the treatment modalities associated with the physical therapy practice of pelvic floor muscle training. Evidence from 5 analyzed studies statistically demonstrated the superiority of this method in relation to control groups, or to groups submitted to other interventions. Positive evidence related to transcutaneous electrical stimulation therapies, intravaginal electrical stimulation, duloxetine, noradrenaline receptor inhibitors, continence pessaries, and lifestyle changes was also observed.

Keywords: Urinary Incontinence, conservative treatment, pelvic floor disorders, gynecology, physical therapy modalities.

RESUMO
A incontinência urinária em mulheres é uma condição de alta incidência e está associada a impacto na qualidade de vida. As modalidades de tratamento conservador são um recurso importante no manejo dessa condição, pois podem ser prescritas com base no diagnóstico clínico, sem necessidade de exames complementares. O presente estudo tem como objetivo reunir evidências atuais sobre as modalidades de tratamento conservador disponíveis para a incontinência feminina publicadas nos últimos 5 anos. Realizando a busca nas bases de dados Medline e LILACS, foram identificados 28 artigos, categorizados com nível de evidência 1b e 2b pela classificação de Oxford, que apresentam resultados originais sobre fisioterapia, medicação e modalidades comportamentais no tratamento não comunitário da incontinência feminina. O estado da arte atual demonstra um domínio de estudos com alto grau de evidência envolvendo as modalidades de tratamento associadas à prática fisioterapêutica de treinamento muscular do assoalho pélvico. Evidências de 5 estudos analisados demonstraram estatisticamente a superioridade deste método em relação aos grupos controle, ou aos grupos submetidos a outras intervenções. Também foram observadas evidências positivas relacionadas a terapias de estimulação elétrica transcutânea, estimulação elétrica intravaginal, duloxetina, inibidores do receptor de noradrenalina, pessários de continência e mudanças no estilo de vida.

Palavras-chave: Incontinência Urinária, tratamento conservador, distúrbios do assoalho pélvico, ginecologia, modalidades de fisioterapia.
1 INTRODUCTION

Urinary incontinence is a condition in which there is involuntary loss of urine (MUTH et al., 2017). It is estimated that about 50% of women will experience some degree of incontinence throughout their lives; however, a significant portion of these cases remain underdiagnosed, as women often consider incontinence to be a normal part of aging (SYLAN; BRECKER, 2016). Although not directly contributing to increased female mortality, urinary incontinence (UI) is a condition with negative impacts, such as reduced quality of life, sexual dysfunctions, increased urogynecological infections, and a greater demand for caregiving (MUNUGANURU et al., 2017; GIBSON et al., 2018). UI is associated with depression, anxiety, work difficulties, and social isolation (RATNER et al., 2011). Moreover, around a third of patients with UI experience urinary leakage during sexual intercourse, causing significant dysfunction in this area (GRAY et al., 2018).

UI is also linked to other comorbidities, such as recurrent infections in the perineal region due to moisture and local irritation (GIBSON et al., 2018). Furthermore, it can contribute to falls in elderly patients, doubling the risk of falls compared to those without urinary symptoms (SCHLUTER et al., 2020). Severe cases of UI may require caregiving, diaper use, greatly impacting patients' quality of life and autonomy (SCHUMPF et al., 2017). The main risk factors for UI include advanced age, multiparity (especially in normal deliveries), obesity, and a family history. In women over 50 years old, prevalence can reach 70%, demonstrating the influence of age in this process (LEE, 2021). Additionally, lifestyle factors can contribute, such as smoking or excessive caffeine consumption (GLEASON, 2013).

Regarding treatment, the latest guideline from the International Continence Society (ICS) suggests that UI treatment should always begin conservatively, reserving surgery for more severe cases and/or cases resistant to clinical treatment (SYLAN; BRECKER, 2016). International studies show that individuals affected by this issue often believe that surgery is the only form of treatment and fear undergoing the procedure, which prevents them from seeking medical assistance (KOLODYSNKA et al., 2019). Although effective, surgical treatment is not without risks and can lead to complications directly or indirectly related to the use of synthetic materials (ZOOROB; KARRAM, 2013).

The aim of this study is to gather current evidence regarding available conservative treatment modalities for female urinary incontinence published in the last 5 years.
2 METHODOLOGY

This is a descriptive cross-sectional study, constituting an integrative literature review. For the review, the following descriptors were applied: "urinary incontinence therapy" [All Fields] OR "urinary incontinence" [All Fields] AND "estrogen" [All Fields] OR "physical therapy" [All Fields] OR "pessary" [All Fields] OR "duloxetine" [All Fields] OR "lifestyle" [All Fields] OR "weight loss" [All Fields]. The search was conducted in the Latin American and Caribbean Health Sciences Literature database (LILACS) through the Virtual Health Library (BVS) and the Online Search and Analysis System of Medical Literature (MEDLINE), via PubMed. Clinical trials and cohort studies that evaluated the efficacy of non-surgical treatment modalities for female urinary incontinence, published between the years 2018 and 2022, were included in this review. Works with publication dates prior to this range were used for context and discussion in the present study. Studies were excluded if: 1) all patient groups underwent some form of surgical intervention; 2) patients initiated treatment without a prior medical diagnosis of urinary incontinence; 3) studies included male patients or those <18 years old; 4) studies evaluated risk factors for urinary incontinence; 5) studies evaluated fecal incontinence associated with urinary incontinence. Duplicated results were removed at the end of the assessment.

The process of selecting the works included in this study begins with filtering the results presented by the databases for clinical trials and cohort studies. Next, a primary selection of studies was conducted based on their titles, and subsequently, the remaining works were evaluated through their abstracts to identify pre-defined eligibility criteria.

The selected studies were classified according to their level of evidence, following the Oxford criteria (CEBM, 2013), and their results were synthesized in tables. Additionally, they were grouped into their respective conservative treatment modalities and submodalities, with a single work possibly included in more than one category. The defined categories were: 1) physiotherapy; 2) continence pessaries; 3) medications; 4) weight loss; and 5) lifestyle changes.

3 RESULTS

The review identified 28 studies, comprising a total sample of 2,306 women, with an average of 82 (±70.75) per study. An additional 12 studies were included in the research development, along with 26 studies selected for contextualization and discussion in the review work.

The average intervention period observed was 21 weeks (±21.62), with the longest evaluation period being 78 weeks and the shortest being 4 weeks. The stratification of the level
of evidence, according to the Oxford classification, resulted in 9 studies classified as 1b: "Controlled and randomized clinical trials with narrow confidence intervals," and 19 as 2b: "Cohort studies and lower-quality randomized clinical trials." Table 1 summarizes the bibliographic portfolio of this review, as well as the most relevant characteristics of the studies included (Table 1).

Table 1: Bibliographic Portfolio of the Review

<table>
<thead>
<tr>
<th>Study</th>
<th>N</th>
<th>T</th>
<th>Level of evidence</th>
<th>Method of treatment</th>
<th>Assessment</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sahin et. al., 2022</td>
<td>51</td>
<td>8</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>OAB-V8/ KHQ/ HLSB II/ BSI/ 24h Pad Test</td>
<td>Turkey</td>
</tr>
<tr>
<td>Cayir et. al., 2021</td>
<td>100</td>
<td>12</td>
<td>2b</td>
<td>Lifestyle</td>
<td>ICIQ-UI SF/ IC/ PGI-I</td>
<td>Turkey</td>
</tr>
<tr>
<td>Wadensten et. al., 2022</td>
<td>102</td>
<td>52</td>
<td>2b</td>
<td>Lifestyle</td>
<td>ICIQ-UI SF/ IC/ PGI-I</td>
<td>Sweden</td>
</tr>
<tr>
<td>Wadensten, et. al., 2021</td>
<td>123</td>
<td>78</td>
<td>2b</td>
<td>Lifestyle</td>
<td>Pessaries</td>
<td>Swedish</td>
</tr>
<tr>
<td>Nekkanti et. al., 2021</td>
<td>50</td>
<td>64</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ PGI-I/ 1h Pad/ Manometria</td>
<td>Iran</td>
</tr>
<tr>
<td>Luginbuehl et. al., 2022</td>
<td>48</td>
<td>24</td>
<td>1b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ PGI-I/ 1h Pad/ Manometria</td>
<td>Brazil</td>
</tr>
<tr>
<td>Antonio et. al., 2022</td>
<td>61</td>
<td>8</td>
<td>1b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ PGI-I/ 1h Pad/ Manometria</td>
<td>Brazil</td>
</tr>
<tr>
<td>Oliveira et. al., 2021</td>
<td>24</td>
<td>52</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ PGI-I/ 1h Pad/ Manometria</td>
<td>Brazil</td>
</tr>
<tr>
<td>Barnes et. al., 2021</td>
<td>43</td>
<td>12</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ OAB-V8/ PGI-I</td>
<td>Iran</td>
</tr>
<tr>
<td>Mirzaei et. al., 2021</td>
<td>60</td>
<td>4</td>
<td>2b</td>
<td>Medication</td>
<td>ICIQ-UI SF/ OAB-V8/ PGI-I</td>
<td>Brazil</td>
</tr>
<tr>
<td>Bezerra et. al., 2020</td>
<td>32</td>
<td>8</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ PGI-I/ 1h Pad/ Manometria</td>
<td>Brazil</td>
</tr>
<tr>
<td>Takahashi et. al., 2021</td>
<td>245</td>
<td>8</td>
<td>1b</td>
<td>Medication</td>
<td>ICIQ-UI SF/ PGI-I/ 1h Pad/ Manometria</td>
<td>Japan</td>
</tr>
<tr>
<td>Hagovska et. al., 2021</td>
<td>158</td>
<td>12</td>
<td>2b</td>
<td>Physiotherapy/ Medication</td>
<td>ICIQ-UI SF/ PGI-I/ IEF/ I-QOL</td>
<td>Slovakia</td>
</tr>
<tr>
<td>Figueiredo et. al., 2020</td>
<td>90</td>
<td>24</td>
<td>1b</td>
<td>Physiotherapy</td>
<td>KHQ/ Manometria/ I-QOL</td>
<td>Brazil</td>
</tr>
<tr>
<td>Fitz et. al., 2020</td>
<td>69</td>
<td>12</td>
<td>1b</td>
<td>Physiotherapy</td>
<td>I-QOL/ OGS/ IEF/ I-QOL</td>
<td>Brazil</td>
</tr>
<tr>
<td>Fitz et. al., 2018</td>
<td>27</td>
<td>12</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>OAB-V8/ I-QOL/ IEF/ I-QOL</td>
<td>Brazil</td>
</tr>
<tr>
<td>Marques et. al., 2020</td>
<td>47</td>
<td>10</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ IEF/ I-QOL/ OGS/ Manometria</td>
<td>Brazil</td>
</tr>
<tr>
<td>Oliveira et. al., 2019</td>
<td>22</td>
<td>8</td>
<td>1b</td>
<td>Physiotherapy/ Perda de peso</td>
<td>ICIQ-UI SF/ 1h Pad/ Manometria</td>
<td>Brazil</td>
</tr>
<tr>
<td>Ptak et. al., 2019</td>
<td>137</td>
<td>12</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>ICIQ-LUTS/Sol/ IEF/ I-QOL</td>
<td>Poland</td>
</tr>
<tr>
<td>Due et. al., 2019</td>
<td>41</td>
<td>12</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ PGI-I/ IEF/ I-QOL</td>
<td>Denmark</td>
</tr>
<tr>
<td>Elmendul et. al., 2018</td>
<td>36</td>
<td>78</td>
<td>1b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ PGI-I/ IEF/ I-QOL</td>
<td>Denmark</td>
</tr>
<tr>
<td>Brykoviene et. al., 2018</td>
<td>67</td>
<td>24</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ PGI-I/ IEF/ I-QOL</td>
<td>Lithuania</td>
</tr>
<tr>
<td>Andrade et. al., 2018</td>
<td>99</td>
<td>4</td>
<td>1b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ PGI-I/ IEF/ I-QOL</td>
<td>Brazil</td>
</tr>
<tr>
<td>Breyer et. al., 2018</td>
<td>338</td>
<td>24</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>ICIQ-LUTS/Sol/ IEF/ I-QOL</td>
<td>Brazil</td>
</tr>
<tr>
<td>Linhares et. al., 2021</td>
<td>137</td>
<td>12</td>
<td>1b</td>
<td>Physiotherapy</td>
<td>OAB-V8/ PGI-I/ IEF/ I-QOL</td>
<td>Brazil</td>
</tr>
<tr>
<td>Cavenagh et. al., 2020</td>
<td>27</td>
<td>6</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ PGI-I/ IEF/ I-QOL</td>
<td>Brazil</td>
</tr>
<tr>
<td>Boaretto et. al., 2019</td>
<td>57</td>
<td>12</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI SF/ PGI-I/ IEF/ I-QOL</td>
<td>Brazil</td>
</tr>
<tr>
<td>Dos Santos et. al., 2019</td>
<td>15</td>
<td>10</td>
<td>2b</td>
<td>Physiotherapy</td>
<td>ICIQ-UI-SF/ 24h Pad Test</td>
<td>Brazil</td>
</tr>
</tbody>
</table>

Caption: N: number of evaluated patients; T: intervention duration (in weeks); OAB-V8: urinary Diary, Overactive Bladder Questionnaire; KHQ: King’s Health Questionnaire; HLSB II: Healthy Lifestyle Behavior Scale II; BSI: Brief Symptom Inventory; ICIQ-UI SF: International Consultation on Incontinence Questionnaire Urinary Incontinence Short Form; IC: The Incontinence Catastrophizing; PGI-I: Patient’s Global Impression of Improvement; ICIQ-LUTS/Sol: ICIQ Lower Urinary Tract Symptoms Quality of Life Module; I-QOL: Incontinence Quality of Life Questionnaire; OGS: Oxford Grading Scale; PAQ: Paffenbarger Activity Questionnaire.

Source: Prepared by the authors, 2023.
Regarding the methodology for assessing urinary incontinence symptoms, different validated questionnaires were employed by the researchers. The most commonly used methods were the International Consultation on Incontinence Questionnaire Urinary Incontinence Short Form (ICIQ-UI SF), present in 61% of the studies, the Patient's Global Impression of Improvement (PGI-I), used in 28% of the studies, and the Urinary Diary, Overactive Bladder Questionnaire (OAB-V8), utilized in 21% of the cases. Table 2 illustrates the frequency of urinary incontinence assessment methods employed in the studies analyzed by this review, taking into account that the majority of studies used more than one assessment method (Table 2).

<table>
<thead>
<tr>
<th>Method</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICIQ-UI SF</td>
<td>17 (61%)</td>
</tr>
<tr>
<td>PGI-I</td>
<td>8 (28%)</td>
</tr>
<tr>
<td>OAB-V8</td>
<td>6 (21%)</td>
</tr>
<tr>
<td>Manometria</td>
<td>5 (18%)</td>
</tr>
<tr>
<td>KHQ</td>
<td>3 (11%)</td>
</tr>
<tr>
<td>ICIQ-LUTSqol</td>
<td>3 (11%)</td>
</tr>
<tr>
<td>I-QOL</td>
<td>3 (11%)</td>
</tr>
<tr>
<td>24h Pad test</td>
<td>3 (11%)</td>
</tr>
<tr>
<td>1h Pad test</td>
<td>2 (7%)</td>
</tr>
<tr>
<td>OGS</td>
<td>2 (7%)</td>
</tr>
<tr>
<td>IC</td>
<td>2 (7%)</td>
</tr>
<tr>
<td>IEF</td>
<td>2 (7%)</td>
</tr>
<tr>
<td>HLSB II</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>BSI</td>
<td>1 (3%)</td>
</tr>
<tr>
<td>PAQ</td>
<td>1 (3%)</td>
</tr>
</tbody>
</table>

Caption: OAB-V8: Urinary Diary, Overactive Bladder Questionnaire; KHQ: King’s Health Questionnaire; HLSB II: Healthy Lifestyle Behavior Scale II; BSI: Brief Symptom Inventory; ICIQ-UI SF: International Consultation on Incontinence Questionnaire Urinary Incontinence Short Form; IC: The Incontinence Catastrophizing; PGI-I: Patient's Global Impression of Improvement; ICIQ-LUTSqol: ICIQ Lower Urinary Tract Symptoms Quality of Life Module; I-QOL: Incontinence Quality of Life Questionnaire; OGS: Oxford Grading Scale; PAQ: Paffenbarger Activity Questionnaire.

Source: Prepared by the authors, 2023.

The majority of the identified studies (n=20) examined the effects of physiotherapeutic techniques in the treatment of urinary incontinence. The effects of medications were assessed by 4 studies, weight loss by 2 studies, lifestyle changes by 3 studies, and the use of continence pessaries in only 1 study (Table 3).

<table>
<thead>
<tr>
<th>Intervention</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physiotherapy</td>
<td>20 (71%)</td>
</tr>
<tr>
<td>PFMT</td>
<td>17 (61%)</td>
</tr>
<tr>
<td>Transcutaneous electrostimulation</td>
<td>7 (25%)</td>
</tr>
<tr>
<td>Intravaginal electrostimulation</td>
<td>4 (14%)</td>
</tr>
<tr>
<td>Biofeedback</td>
<td>1 (3%)</td>
</tr>
</tbody>
</table>
4 DISCUSSION

The literature provides strong evidence for the effectiveness of pelvic floor muscle training (PFMT) in managing UI symptoms (ASSIS et al., 2013; BRITO et al., 2017; FITZ et al., 2017). This technique allows for the strengthening of muscles, reducing involuntary urine loss (BRITO et al., 2017). The technique was found to be superior to no treatment and improved patients’ quality of life (MORONI et al., 2016; FITZ et al., 2017). Although studies demonstrate the benefit of the technique, there is still no single recommendation on how PFMT should be performed, given the high heterogeneity of studies. However, it is known that these exercises work better when they are more intense, supported by a healthcare professional, and combined with strategies to support their continued use (TODHUNTER-BROWN, 2022).

Comparing home-based exercises with those done in physiotherapy clinics, the selected article in this study found no difference between the two possibilities (FITZ et al., 2020). It is important to note that home-based PFMT, in the study in question, was supervised by physiotherapy professionals, corroborating with literature findings that supervised exercises are more effective (FERREIRA et al., 2012; MORONI et al., 2016). Additionally, patients had a better impact on quality of life when performing PFMT at home (MORONI et al., 2016).

According to Cayir et al. (2021), when exercises are performed without supervision, there should be minimal instruction before starting the exercises. In their study, the training program reduced urgency UI symptoms among women, improved quality of life, and positively affected their psychological symptoms. Similarly, psychoeducation about UI and its treatment proved effective in treating the condition in other studies (MORONI et al., 2016). On the other hand, Andrade et al. (2018) found that despite increasing women’s knowledge about intimate health, the training program was not effective in improving muscle contraction as measured by manometry.

In addition to isolated PFMT, some authors study adjunct therapies to be performed concomitantly with muscle training. Ptak et al. (2019) and Marques et al. (2020) evaluated whether strengthening other muscle groups near the pelvic region would provide additional benefits in treating UI. However, in both studies, isolated PFMT was equivalent or superior, which dismisses these options for adjunct treatment.
Biofeedback therapy is also a prominent modality, characterized by providing information about pelvic floor muscle contraction and relaxation to the patient through visual and/or auditory signals. This is useful for patients who cannot spontaneously contract or relax the muscles (TERLIKOWSKI, 2013; MORONI et al., 2016). Although biofeedback has been described as beneficial in PFMT, in the article selected for this study, biofeedback combined with PFMT was equivalent to isolated PFMT (BARNES et al., 2021).

Another option for adjunct treatment is electrostimulation (SAHIN et al., 2022). In this review, transcutaneous tibial nerve electrostimulation proved most effective when combined with PFMT (SANTOS et al., 2019; LINHARES et al., 2021; OLIVEIRA et al., 2021). For intravaginal electrostimulation, results were conflicting, with Elmelund et al. (2018) not demonstrating superiority, while Antônio et al. (2022) found that intravaginal electrostimulation enhances PFMT effectiveness. Literature presents similar results to Antônio et al. (2022), indicating that intravaginal electrostimulation results in better quality of life and less urine loss (SANTOS et al., 2009; MORONI et al., 2016). Thus, both therapies can be useful as adjunct therapy to PFMT, especially in the initial treatment of women who cannot effectively contract their muscles for PFMT.

Lifestyle modifications, such as weight loss and attempts to control bladder emptying frequency, have also proven beneficial for certain types of UI (TODHUNTER-BROWN, 2022). Bykoviene et al. (2018) demonstrated the effectiveness of lifestyle guidance in improving UI symptoms. An option for maintaining lifestyle changes and frequent PFMT exercises is the use of mobile apps. Wadensten et al. (2021) evaluated the efficacy of a UI self-management app containing a PFMT program, bladder training exercises, incontinence-related psychoeducation, and lifestyle counseling. Effective self-management led to long-term reduction in urinary leakage and urgency symptoms, improving quality of life.

Despite evidence that weight loss improves UI symptoms, the studies in this review that analyzed this variable did not find a relationship between weight loss and symptom improvement (BREYER et al., 2018; OLIVEIRA et al., 2019). The study compared weight loss combined with PFMT versus isolated PFMT, showing superiority in the results. A systematic review on the topic gathered results from four studies suggesting that weight loss may reduce incontinence in overweight women, warranting further research. However, the authors emphasize that a large proportion of participants had a concurrent diagnosis of diabetes mellitus, which may have affected the results (TODHUNTER-BROWN, 2022). The effectiveness of PFMT in managing UI, related to both symptoms and women's quality of life, is once again highlighted.
Regarding drug therapy, duloxetine is the only drug that increases urethral sphincter activity used in stress UI treatment, as per a systematic review. The drug reduces incontinence frequency by 50% during the treatment process and significantly improves patients' quality of life (MARIAPPAN et al., 2017; EVANGELISTA et al., 2021). However, this medication is associated with various side effects, with nausea being the main one, affecting about 30% of patients using it. Nausea is generally classified as mild to moderate and is self-limiting, resolving spontaneously within a few days to weeks. However, it is the primary cause of treatment discontinuation (ARIMAN et al., 2021). Thus, other options have been considered for stress UI treatment. Takahashi et al. (2021), for instance, analyzed the effectiveness of a new drug, a noradrenaline receptor inhibitor, but without positive results.

Moreover, duloxetine has been investigated for the treatment of urgency UI, even though its original indication is for stress UI. Mirzaei et al. (2021) conducted a randomized clinical trial to compare the effectiveness and side effects of duloxetine versus solifenacin in treating urgency UI. According to this evaluation, duloxetine may be a suitable alternative option for overactive bladder treatment. Nevertheless, for both types of UI, combination with PFMT is essential for positive outcomes (HAGOVSKA et al., 2021).

5 CONCLUSION

Urinary incontinence is a condition with a high incidence among the female population and is associated with a significant impact on quality of life. A thorough understanding of the evidence regarding conservative treatment modalities is crucial for professional practice, as these modalities can be prescribed based on clinical diagnosis without the need for additional tests. In light of the evidence from original studies published in the last 5 years, pelvic floor muscle training has been the most extensively studied and evidenced as the primary conservative method in the treatment of female urinary incontinence, either in isolation or in combination with transcutaneous tibial nerve electrostimulation or duloxetine.
REFERENCES


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