

Use of pessaries in pelvic organ prolapse: an integrative review**

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ABSTRACT

Objective: To analyze the studies available in the literature on the use of pessaries for the treatment of pelvic organ prolapse. **Method:** Integrative review of the literature, carried out from May to September 2023, by consulting the databases: Medical Literature Analysis via PubMed, Latin American Literature in Health Sciences, Nursing Database: Brazilian Bibliography and Scientific Electronic Library Online via Virtual Health Library. **Results:** 174 articles were recovered, 06 of the BVS and 168 of Medline. 07 duplicated publications were removed and 140 were excluded because they did not respond to the research issue. Thus, 28 studies were eligible, 12 excluded because they did not meet the inclusion and exclusion criteria, and 15 were selected for the study. **Conclusion:** The use of vaginal pessaries not only represents an effective conservative approach, but also proves to be a significant ally in the preoperative context for the treatment of pelvic organ prolapse. Pessaries should be offered to patients as a first-line treatment, as they present low risks, improve symptoms almost immediately.

DESCRIPTORS: Pelvic organ prolapse. Pessaries. Conservative treatment. Stomatherapy.

Utilização de pessários nos prolapso de órgãos pélvicos: revisão integrativa

RESUMO

Objetivo: Analisar os estudos disponíveis na literatura sobre o uso dos pessários para o tratamento dos prolapso de órgãos pélvicos. **Método:** Revisão integrativa da literatura, desenvolvida no período de maio a setembro de 2023, mediante consulta nas bases de dados: *Medical Literature Analysis* via PubMed, Literatura Latino Americana em Ciências da Saúde, Banco de Dados em Enfermagem: Bibliografia Brasileira e *Scientific Electronic Library Online* via Biblioteca Virtual em Saúde. **Resultados:** Foram recuperados 174 artigos, sendo 06 da BVS e 168 da MEDLINE. Removeram-se 07 publicações duplicadas e 140 foram excluídos por não atenderem à questão de pesquisa. Assim, 28 estudos foram elegíveis, 12 excluídos por não respeitarem aos critérios de inclusão e exclusão, e 15 selecionados para a realização do estudo. **Conclusão:** O uso de pessários vaginais não apenas representa uma abordagem conservadora eficaz, mas também se mostra como um aliado valioso no contexto pré-operatório para o tratamento do prolapso do órgão pélvico. Os pessários devem ser oferecidos às pacientes como tratamento de primeira linha, por apresentar baixos riscos e melhorar os sintomas quase imediatamente.

DESCRIPTORES: Prolapso de órgão pélvico. Pessários. Tratamento conservador. Estomaterapia.

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Uso de pesarios en los prolapso de órganos pélvicos: revisión integrativa

RESUMEN

Objetivo: Analizar los estudios disponibles en la literatura sobre el uso de los pesarios para el tratamiento de los prolapso de órganos pélvicos. **Método:** Revisión integrativa de la literatura, desarrollada de mayo a septiembre de 2023, tras consulta en las bases de datos: *Medical Literature Analysis* vía PubMed, Literatura Latinoamericana en Ciencias de la Salud, Base de Datos en Enfermería: Bibliografía Brasileña y *Scientific Electronic Library Online* vía Biblioteca Virtual en Salud. **Resultados:** Se recuperaron 174 artículos, siendo 6 de la BVS y 168 de MEDLINE. Se eliminaron siete publicaciones duplicadas y se excluyeron 140 por no responder a la pregunta de investigación. Así, 28 estudios fueron elegibles, 12 fueron excluidos por no cumplir con los criterios de inclusión y exclusión, y 15 fueron seleccionados para la realización del estudio. **Conclusión:** El uso de pesarios vaginales no solo representa un enfoque conservador efectivo, sino que también se presenta como un aliado valioso en el contexto preoperatorio para el tratamiento del prolapso de órganos pélvicos. Los pesarios deben ofrecerse a los pacientes como tratamiento de primer línea, ya que presentan bajos riesgos y mejora los síntomas casi de forma inmediata.

DESCRIPTORES: Prolapso de órgano pélvico. Pesarios. Tratamiento conservador. Estomaterapia.

INTRODUCTION

Pelvic prolapses, also known as Pelvic Organ Prolapse (POP), are a group of medical conditions characterized by the downward displacement or protrusion of pelvic organs (such as the uterus, bladder, rectum, and vaginal vault) from their anatomical position. This condition, caused by weakness or injury to the muscles and ligaments that support the organs in the pelvis, is more common in women, particularly after menopause, and can vary in severity and involve different organs¹.

The symptoms of POP include: feeling of heaviness or pressure in the pelvis; discomfort during sexual intercourse; urinary or fecal incontinence; difficulty emptying the bladder or bowel; and lower back pain. Key risk factors include advanced age, gynecological history, obesity, chronic constipation, and smoking¹.

Treatment includes conservative measures, such as pelvic floor strengthening exercises, the use of support devices (pessaries), and physical therapy, with surgical intervention recommended in more severe cases to repair weakened tissues and reposition pelvic organs².

Pessaries are devices made of rubber or silicone that provide structural support and support to prolapsed organs. They are divided into two categories:

1. Support and
2. Occlusive.

Support pessaries, such as the ring, ring with membrane, and Shaatz, do not completely occlude the genitalia and are generally more accepted by the female population, particularly those who are sexually active, as they allow intercourse while being worn, are less invasive, and cause less discomfort. In contrast, occlusive pessaries, such as donuts, gelhorn, and ring, are more invasive, as they occlude the genitalia, need to be removed for intercourse, and cause greater discomfort³.

These devices are recommended as a first-line therapeutic option for a variety of symptoms and signs related to prolapse, due to their good cost-effectiveness and low risk of complications. Additionally, they are a safe option for long-term use (longer than 12 months) and allow women to manage their POP. However, there are adverse events, such as expulsion, vaginal pain, urinary incontinence, and erosion or infection, which may lead to discontinuation⁴.

The use of pessaries in clinical practice is still limited due to factors such as lack of awareness among the population⁵ and the predominantly objective assessment of women with POP⁶. The choice between using a pessary or opting for surgery is influenced by the stage of the disease, the presence of other comorbidities, and age. However, information regarding efficacy,

quality of life (QOL), and potential complications of the interventions is also crucial in this decision-making process, and it is the responsibility of the healthcare professional to provide such clarifications⁸.

It is important to highlight that the increase in female life expectancy may negatively influence the prevalence of POP. A review conducted in 2023 found data indicating that the prevalence of pelvic floor disorders affects 25% of the female population in the United States, and U.S. scientists predict a 46% increase in the number of women with prolapse in America⁹. In the state of Piauí, between 2018 and 2023, there were 1,601 hospitalizations due to POP, with 55% of the women being between the ages of 60 and 69¹⁰.

In addition to the impacts generated by POP in the healthcare sector, this condition causes social, psychological, and financial burdens for the affected women, which underscores its significance for global public health. However, conservative measures can improve this scenario, although the lack of knowledge among healthcare professionals and the population limits the choice of appropriate treatment. Therefore, this study was conducted with the aim of gathering information about the pessary, considered a versatile technology capable of improving the quality of life of women with POP and reducing the costs associated with hospitalizations and surgeries.

OBJECTIVES

The objective was to analyze the available studies in the literature on the use of pessaries for the treatment of pelvic organ prolapse.

METHODS

The study is an integrative literature review, a method that allows for the synthesis and interpretation of previous research on the topic through a detailed bibliographic analysis of the works already published on the subject.

For organizational purposes, six methodological steps were developed:

1. Selection of the topic and definition of the research question;
2. Sampling and literature search;
3. Data extraction and categorization;
4. Critical analysis of the included studies;
5. Data interpretation;
6. Presentation of the results and discussion¹¹.

For the formulation of the guiding question of the study, the PICO strategy was used, in which the following were defined: the Problem (P): pelvic organ prolapse; the Interest Phenomenon (I): pessaries; and the Context (Co): conservative treatment¹². Thus, the guiding question of the study was: What evidence is presented for the use of pessaries in the conservative treatment of pelvic organ prolapse?

The inclusion criteria for the studies were: original articles, regardless of the language of publication, and with no time filter. Articles that did not fit the addressed topic were excluded, and duplicates were counted only once. Documents such as event proceedings, letters to the editor, theses, dissertations, and literature reviews were not included.

For the search, the period between May and September 2023 was used, and the following databases were consulted: Medical Literature Analysis (MEDLINE) via PubMed, Latin American Literature in Health Sciences (LILACS), Brazilian Nursing Database (BDENF), and Scientific Electronic Library Online (SciELO) via the Virtual Health Library (BVS). The descriptors were selected through consultation to the terms of the Medical Subject Headings (MeSH) and the Descriptors in Health Sciences (DeCS). The following are the search strategies conducted in BVS and MEDLINE/PubMed, noting that the search alignment was adjusted for the other databases (LILACS and BDENF), using the boolean operators "OR" and "AND," as shown in Table 1 and Table 2.

Table 1. Construction of the search strategy in BVS. Teresina (PI), 2023.

Virtual Health Library – VHL (LILACS, BDENF, IBECs) DeCS	
P	Pelvic organ prolapse
I	Pessaries
Co	Conservative treatment
((pelvic organ prolapse) OR (pelvic prolapses) OR (prolapse of pelvic organs) OR (prolapse pélvico) OR (pelvic organ prolapses) OR (pelvic prolapse) OR (db:(“LILACS” OR “IBECs” OR “BDENF”))) AND ((pessaries) OR (pessary) OR (pesarios) OR (pessário) OR (pessarie) OR (pesario) OR (db:(“LILACS” OR “IBECs” OR “BDENF”))) AND ((conservative treatment) OR (conservative treatments) OR (tratamento conservador) OR (tratamentos conservadores) OR (tratamiento conservador))	

Source: Prepared by the author.

Table 2. Construction of the search strategy in MEDLINE/PubMed. Teresina (PI), 2023.

MEDLINE/PubMed -MESH	
P	Pelvic organ prolapse
I	Pessaries
Co	Conservative treatment
((((“pelvic organ prolapse”[MeSH Terms] OR Pelvic Organ Prolapse[Text Word]) OR (“pelvic organ prolapse”[MeSH Terms] OR Pelvic Organ Prolapse[Text Word]) OR (Organs[All Fields] AND (“prolapse”[MeSH Terms] OR Prolapses[Text Word]))) OR (“pelvis”[MeSH Terms] OR Pelvic[Text Word]) AND (“prolapse”[MeSH Terms] OR Prolapse[Text Word]) OR (“prolapse”[MeSH Terms] OR Prolapses[Text Word])) OR (“pelvis”[MeSH Terms] OR Pelvic[Text Word]) AND (“prolapse”[MeSH Terms] OR Prolapse[Text Word]) OR (“prolapse”[MeSH Terms] OR Prolapses[Text Word])) AND (“pessaries”[MeSH Terms] OR Pessaries[Text Word]) OR (“pessaries”[MeSH Terms] OR Pessaries[Text Word]) OR (“pessaries”[MeSH Terms] OR Pessaries[Text Word])) AND (“conservative treatment”[MeSH Terms] OR Conservative Treatment[Text Word]) OR (“therapeutics”[MeSH Terms] OR TreatmentS[Text Word]))	

Source: Prepared by the author.

The Levels of Evidence (LE) were classified into seven levels, as follows:

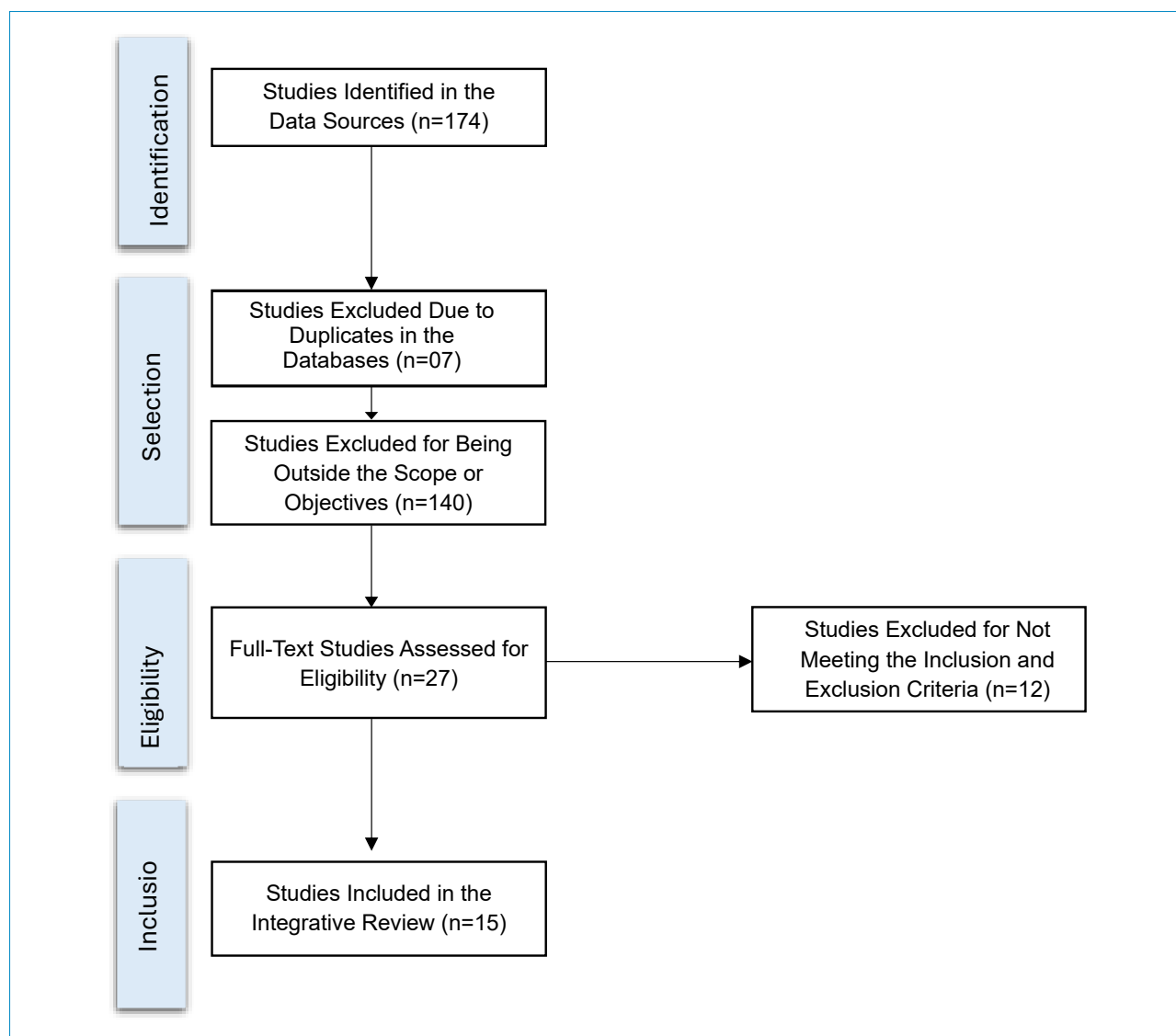
- I. Systematic review or meta-analysis of randomized controlled trials;
- II. Well-designed randomized controlled trials;
- III. Well-designed clinical trials without randomization;
- IV. Well-designed cohort and case-control studies;
- V. Systematic review of descriptive and qualitative studies;
- VI. Descriptive or qualitative studies; and
- VII. Expert opinion or reports.

The process of identification, selection, application of eligibility criteria, and inclusion of studies was organized in a flowchart adapted from the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines) (Figure 1)¹⁴. The data were extracted and recorded systematically and presented in an organized manner to facilitate analysis, placing them in a table and separating them into the following subitems: Author/year/journal/country, title, study type, level of evidence, objective, and main findings (Table 1). Finally, a descriptive critical analysis was conducted.

RESULTS

The searches retrieved 174 articles, with 6 from BVS and 168 from MEDLINE. Seven publications were removed due to duplication, five of which were found in both databases, leaving 1 article from BVS and 15 from MEDLINE. After reading the title and abstract, 140 publications were excluded for not addressing the research question. As a result, 27 studies remained eligible for full-text reading. Of these 27 articles, 12 did not meet the inclusion and exclusion criteria and were excluded, leaving 15 for the study.

The publication year of the studies ranged from 1998 to 2022, with the majority being conducted internationally. Among the countries where the studies were developed, the following stand out: Brazil (4), Netherlands (3), United States



Source: Authors.

Figure 1. Flowchart of identification, selection, eligibility, and inclusion of articles¹⁴. Teresina (PI), Brasil, 2023.

of America (4), Chile (1), South Korea (1), France (1), and China (1). Regarding the methodology, the following study designs were observed: cross-sectional (2), observational (4), cohort (5), randomized controlled trial (2), non-randomized clinical trial (1), and multicenter randomized trial (1). For the level of evidence, the following were identified: II (3), III (1), IV (6), and VI (5)

The studies were grouped by thematic axis, resulting in three categories: Pelvic Organ Prolapse: Symptoms and Treatment (05)¹⁵⁻¹⁹; Acceptance, Adaptation, and Cost-effectiveness of Pessaries (05)²¹⁻²⁵; and Pessaries and Quality of Life of Women with The extracted data were organized and presented in Table 3^{15-19,21-30}.

DISCUSSION

Pelvic organ prolapse: symptoms and treatment

The management of POP is determined, among other factors, by the symptoms. A study conducted in South Korea, aimed at obtaining the clinicopathological characteristics and treatment patterns, reported that POP is common in women of all ages, with most patients being asymptomatic. The most frequent symptoms are vaginal and

Table 3. Summary of the studies included in the research. Teresina (PI), Brazil, 2023.

Reference	Journal/ Country	Title	Type of study	Level of evidence	Objective	Main findings
Jo et al. ¹⁵	Pan African Medical Journal/ South Korea	Clinicopathologic characteristics and treatment patterns of pelvic organ prolapse in South Korea.	Retrospective cohort study	IV	To investigate the clinicopathologic characteristics, treatment methods, and complications related to conservative and surgical management in patients with pelvic organ prolapse.	Conservative treatment of POP with the use of a pessary and surgical treatment both presented the most common symptom as a sensation of bulging. The most prevalent underlying condition was hypertension, and there was no difference in the incidence of complications between the two approaches
Cundiff e Addison ¹⁶	Obstetrics and Gynecology Clinics of North American/ United States	Management of pelvic organ prolapse.	Cross- sectional observational study	VI	To present the variety of pessaries available that allows for a choice tailored to meet the patient's needs.	The wide variety of pessaries available allows for a highly precise choice to meet the needs of a given patient. Different approaches are reviewed. A paradigm for selecting surgical repair is presented, based on fascial and muscular support defects and on the patient's functional demands and limitations.
Coelho et al. ¹⁷	Brazilian Journal of Gynecology and Obstetrics/ Brazil	Can the pessary use modify the vaginal microbiological flora? A cross- sectional study.	Cross- sectional study	VI	To determine whether the use of a vaginal pessary can affect the vaginal environment.	Women who used pessaries for the treatment of POP experienced more vaginal discharge, itching, and genital ulcers than non-users.
Gold et al. ¹⁸	Journal of the American Geriatrics Society/ United States	A tailored flexible vaginal pessary treatment for pelvic organ prolapse in older women.	Prospective cohort study	IV	To present a flexible vaginal pessary protocol for elderly women with significant pelvic organ prolapse..	A portion of the patients underwent POP surgery, and a small minority were able to manage the pessary on their own. Surgeons chose the use of the pessary due to the advanced age and comorbidities of elderly patients. Some also presented stress urinary incontinence after pessary insertion, which was managed conservatively.
Long et al. ¹⁹	Scientific Reports/China	An estradiol-eluting pessary to treat pelvic organ prolapse.	Non- randomized clinical study	III	To develop an estradiol- releasing pessary using 3D-printed molds.	A pessary was developed for the treatment of pelvic organ prolapse with estradiol release over three months, and it was used effectively in the treatment of both pelvic organ prolapse and vaginal atrophy.

Continue...

Table 3. Continuation.

Reference	Journal/ Country	Title	Type of study	Level of evidence	Objective	Main findings
Vasconcelos et al. ²¹	Neurourology and Urodynamics/ Brazil	Pessary evaluation for genital prolapse treatment: from acceptance to successful fitting.	Prospective cohort study	IV	To determine the percentage of women with symptomatic pelvic organ prolapse who chose a pessary and successfully passed the fitting test; to identify the pessary size most commonly used for each prolapse stage; and to identify risk factors associated with unsuccessful adaptation.	The vaginal pessary proved to be a highly accepted choice with high adaptation success rates. More than 70% were successful within four weeks. Women with a body mass index ≥ 30 , total vaginal length < 7.5 cm, and those who were sexually active had a higher rate of unsuccessful adaptation.
Panman et al. ²²	International Urogynecology Journal/ Holanda	Predictors of unsuccessful pessary fitting in women with prolapse: a cross-sectional study in general practice.	Cross-sectional study	IV	To estimate the proportion of women in a general gynecology clinic with symptomatic pelvic organ prolapse who experience unsuccessful pessary fitting and to identify characteristics associated with unsuccessful pessary fitting.	The association with age may reflect greater acceptance of conservative treatments for prolapse among older women. This is the first study on predictive factors for unsuccessful pessary fitting in a general gynecology clinic.
Nager et al. ²³	International Urogynecological Journal Pelvic Floor Dysfunction / United States	Incontinence pessaries: size, POPQ measures, and successful fitting.	Multicenter randomized study	II	To determine whether the success of incontinence pessary adaptation or the pessary size can be predicted by specific POP-Q measurements in women without advanced pelvic organ prolapse.	The majority of women with stress urinary incontinence can be successfully fitted with an incontinence pessary, but specific POP-Q measurements were not useful in determining the pessary size for incontinence.
Panman et al. ²⁴	Menopause (New York, N.Y)/ Netherlands	Effectiveness and cost-effectiveness of pessary treatment compared with pelvic floor muscle training in older women with pelvic organ prolapse: 2-year follow-up of a randomized controlled trial in primary care.	Randomized clinical trial	II	To investigate the effectiveness and cost-effectiveness of pessary treatment compared with PFMT in women with prolapse over a 2-year period.	Em mulheres idosas com prolapso sintomático não houve diferença significativa entre o tratamento com pessário e o TMAP na redução dos sintomas do assoalho pélvico. Sintomas específicos relacionados ao prolapso melhoraram mais com o uso do pessário.
Wiegiersma et al. ²⁵	Maturitas/ Netherlands	Pelvic floor muscle training versus watchful waiting or pessary treatment for pelvic organ prolapse: design and participant baseline characteristics of two parallel pragmatic randomized controlled trials in primary care.	Randomized clinical trial	II	To describe the design of the POPPS and the challenges encountered, as well as to present the baseline characteristics of the participants.	It was observed that both pelvic floor muscle training and the use of pessaries for POP resulted in improvement of symptoms as the primary outcome, and improvement in quality of life, sexual function, and reduction of POP as secondary outcomes.

Continue...

Table 3. Continuation.

Reference	Journal/ Country	Title	Type of study	Level of evidence	Objective	Main findings
Zeiger et al. ²⁶	International Urogynecology/ Brazil	Vaginal pessary in advanced pelvic organ prolapse: impact on quality of life.	Multicenter, longitudinal, prospective observational study	IV	To evaluate the impact and effectiveness of vaginal pessary use on the quality of life of women with advanced-stage POP (stages III and IV).	Good treatment continuation rate with pessary use and a positive impact on sexual function, mental health, and quality of life.
Mendes et al. ²⁷	International Urogynecology/ Brazil	Symptomatic and anatomic improvement of pelvic organ prolapse in vaginal pessary users.	Prospective cohort study	IV	To evaluate the effects of using a ring pessary on quantitative POP measurements through Pelvic Organ Prolapse Quantification (POP-Q) and on quality of life (QoL).	There was a reduction in POP in at least one of the vaginal compartments in the women included. When assessing individual measurements, reductions were observed in all parameters. There was also an improvement in both overall and specific quality of life.
Lasnel et al. ²⁸	Progrès Urologie/ France	Patient satisfaction and symptom changes in women using a pessary for pelvic organ prolapse.	Single-center cohort study	IV	To evaluate and investigate the factors associated with patient satisfaction among pessary users.	The pessary is an effective device with a high satisfaction rate. It is a true first-line therapeutic alternative, with no major complications in women with symptomatic POP.
Tenfeld et al. ²⁹	Female Pelvic Medicine and Reconstructive Surgery/United States	Quality of life in women who use pessaries for longer than 12 months.	Cross- sectional observational study	VI	To describe symptom discomfort and quality of life in women using pessaries for urinary incontinence and/or prolapse for at least 12 months.	Pessaries can be used to manage pelvic floor symptoms for long periods. Among 56 women, 29% experienced complications with pessary use, and 41% considered surgical repair for POP. Women who were considering surgery had higher PFDI-20 scores related to more bothersome prolapse symptoms than those who did not consider surgery
Gurovich et al. ³⁰	Clinic and Research in Gynecology and Obstetrics/ Chile	Quality of life, complications associated with pessaries for conservative treatment of pelvic organ prolapse.	Descriptive observational, longitudinal	V	To evaluate quality of life, complications, and subjective perception of improvement in women with POP treated with pessaries at the Urogynecology	The majority of patients had POP-Q stage III, and one-third were able to remove and reinsert the pessary after using the bathroom. Most patients who experienced complications such as UTIs, vulvovaginitis,

POP: pelvic organ prolapse; QoL: quality of life; ITU: urinary tract infection
Source: Prepared by the author.

urinary. The most common vaginal symptom is the sensation of protrusion, and the urinary symptoms include urinary incontinence, increased urinary frequency, and intestinal symptoms, such as the feeling of incomplete emptying and fecal incontinence¹⁵.

Asymptomatic cases do not require treatment; however, symptomatic cases can be treated with observation, conservative measures such as Pelvic Floor Muscle Training (PFMT), and the use of pessaries, or even surgical intervention. The use of pessaries is preferred before invasive procedures; however, it is the healthcare professional's responsibility to inform the patient of the possible treatment options for the present symptoms and to consider the patient's preferences and clinical characteristics¹⁵.

In 1998, the evidence pointed to the use of pessaries for the treatment of various gynecological conditions, such as uterine malposition, dysmenorrhea, irregular menstruation, and incompetent cervix. During this time, gynecologists' perception was that pessaries were second-line treatments, meaning they should be reserved for individuals unfit for surgery, awaiting surgery, or who had refused surgery¹⁶.

Currently, pessaries are recommended as a first-line treatment, particularly for the population whose advanced age or presence of comorbidities make surgical intervention unfeasible. A prospective cohort study conducted in the United States presented a flexible vaginal pessary protocol for elderly women with significant POP, based on surgeons' recommendations. This instrument can assist other women who do not wish to undergo surgery or who have contraindications.¹⁸

A study that evaluated the effects of using a ring pessary in women with POP showed a significant reduction in POP-Q measurements and an improvement in quality of life after at least four months of use³¹. These findings corroborate the results of the present study, indicating that the pessary is effective in reducing symptoms and improving quality of life.

The literature also presents the use of vaginal estrogen cream for postmenopausal women to reduce dryness, improve local lubrication, and decrease the risk of bleeding and pain during the insertion of the device²⁰. For the same purpose, a non-randomized clinical study conducted in China developed an estriol-releasing pessary to treat POP and vaginal atrophy. In this study, most women were successful in using the pessary, while a small portion was unable to use it¹⁹.

It is important to note that there is a wide variety of pessaries available on the market. This promotes the appropriate choice according to the patient's needs, although it may reflect a lack of consensus on the use of each device. In some cases, the preference for surgical intervention is based solely on medical guidelines, disregarding the anatomical principles and the patient's clinicopathological data¹⁶.

The literature also highlights that some healthcare professionals do not prescribe pessaries due to insufficient clinical experience, which, combined with patient misinformation, creates barriers to this treatment. The Brazilian Unified Health System (SUS), for example, funds surgical interventions for POP rather than conservative approaches. Consequently, in Brazil, surgery is the most accessible option for SUS users, although it results in increased hospital costs with admissions for the government¹⁷.

It is observed that the pessary is still underused as a conservative therapy, primarily due to institutional barriers, insufficient technical training of professionals, and the lack of public initiatives that promote the creation of clinical protocols and the training of professionals who will work in the field.

Adaptation, and cost-effectiveness of pessaries

The main complaints of women using pessaries are: local pain, urinary retention, and leucorrhea²⁰. The literature identifies the most common complications as vaginal bleeding, extrusion, discharge, and constipation. More severe cases can include vaginal ulcers, recurrent urinary tract infections, and bladder outlet obstruction. The formation of fistulas is rare and is primarily related to the improper selection of the pessary²¹.

Pessaries have a high acceptance rate and successful adaptation in women with POP, as well as advantages in reducing costs and waiting time for surgical procedures. However, some factors may interfere with the acceptance of pessaries as a treatment option, such as low educational level and difficulties in adapting to their daily use, including obesity and sexual activity²¹.

When evaluating the predictors of pessary adaptation failure in women with POP, a cross-sectional study conducted in the Netherlands showed that adaptation was successful in only about half of the women in general practice, indicating that the treatment may not be suitable for all symptomatic cases. According to the results, younger age, higher body mass index, and subactive or inactive pelvic floor muscle function are associated with a higher risk of unsuccessful adaptation²².

In a study comparing internal and external pessaries in the treatment of POP, the discontinuation rate of the internal pessary was 49%³², which corroborates the previously mentioned study.

In the United States, a multicenter study investigated whether the success of pessary adaptation for incontinence could be predicted by specific measures of POP quantification and whether these measures predict the size of the pessary in women with non-advanced POP. The majority of participants were successful in using the incontinence ring. Unsuccessful adaptation was not related to a history of hysterectomy, vaginal length, or genital hiatus, but a longer total vaginal length was associated with a higher probability of successful adaptation. However, the measurement of total vaginal length did not contribute to the prediction of the ideal pessary size²³.

Furthermore, regarding other conservative treatments, studies conducted in 20 primary care clinics in the Netherlands compared PFMT to pessaries and concluded that there was no significant difference in the primary outcome, as both alleviated pelvic floor symptoms. However, the pessary was more effective for specific prolapse symptoms, which, according to the literature, makes it more suitable for POP correction, in addition to being more cost-effective, as the medical costs per person over two years were US\$ 309 and US\$ 437, respectively, for pessary use and PFMT^{24,25}.

The analysis of factors associated with adaptation failure reveals that the success of pessary use goes beyond anatomical aspects, requiring an individualized biopsychosocial approach. The absence of care pathways and standardized institutional protocols hinders the availability of the technology in clinical practice.

Use of pessaries in women with prolapse and its impact on quality of life

Quality of life is considered a health indicator assessed by various physical, psychosocial, and economic parameters. POP, a disease with high global prevalence, directly affects the quality of life (QoL) of the female population, particularly in older age groups. Considering this age range, the choice of the ideal treatment involves weighing its risks and impact on the patient's QoL. A study conducted in Brazil from 2013 to 2018 evaluated the outcomes²⁶ of POP treatment with vaginal pessaries and found that the primary effects were the attenuation of vaginal symptoms and the improvement of quality of life, even after the removal of the device²⁷.

The literature emphasizes that early diagnosis and conservative treatment, such as with pessaries are key factors in promoting better quality of life (QoL) for women with POP. A cohort study conducted in France followed and provided pessaries to 85 women, with an average age of 66.9 years, all with POP and the main symptom of vaginal bulging, in stages I (4), II (39), III (35), or IV (7), most of whom had comorbidities. Despite a reduction in participants at the 1st (64) and 6th (32) months, there was a high satisfaction rate with the pessary, 78% and 84%, respectively, primarily associated with the effectiveness and comfort of using the device²⁸.

Similar results were found in another cohort study conducted in two institutions in a city in northeastern Brazil. The study followed 88 women with an average age of 71.5 years, who had advanced-stage POP (III and IV), between 2017 and 2021. The main finding was the relationship between pessary use and improved quality of life (QoL), observed in 92.8% of the participants. Furthermore, all domains of the applied instruments were positively evaluated after the use of the pessary, with vaginal symptoms (91.8%), mental health (80%), sexual symptoms (78.6%), and emotional role (77%) being particularly highlighted²⁶.

Many studies on pessaries and the quality of life of women with POP evaluate its use in the short term (≤ 12 months). A prospective cohort of 50 women with an average age of 70.6, using a pessary for 4 to 48 months, showed an association between longer use and a smaller POP²⁷ measurement. However, another study that evaluated long-term use in 56 women with an average age of 74.4 and an average use time of 4.5 years (ranging from 1 to 15 years) observed that one-third of the participants experienced complications, with erosion being the most notable. Additionally, nearly half of the participants were planning to undergo surgical intervention²⁹.

In Chile, a retrospective study conducted between 2009 and 2018 with 60 women with an average age of 78.7 identified excellent improvement in health conditions with the use of a pessary in approximately 80% of the participants. Those who experienced erosion or vulvovaginitis were using the device for prolonged periods³⁰.

Therefore, the efficacy of the pessary in improving the quality of life of patients with POP can be emphasized. Although complications are infrequent, they directly impact the quality of life of women and may be related to the longer duration of pessary use.

Limitations of the study

As a limitation of the study, it can be pointed out that the search was conducted in only two databases, although the number of selected articles was sufficient for a general analysis of the topic.

Recommendations

This study holds significant social and clinical relevance as it gathers theoretical support and scientific evidence regarding the treatment of POP with the use of pessaries, including aspects such as acceptance, adaptation, cost-effectiveness, and impact on the quality of life (QoL) of the female population. These findings can be accessed by the general population and healthcare professionals. However, it is worth noting the limited number of specific publications on the use of pessaries for POP, particularly regarding the evaluation of the cost-benefit of the device compared to other conservative treatments. Therefore, it is advisable to conduct further studies that address these gaps.

CONCLUSION

The gathered evidence highlights that the use of pessaries for the treatment of pelvic organ prolapse represents an effective conservative approach, in addition to reducing the number of surgical interventions. However, considering the knowledge gap surrounding this treatment, there is a need for education and training of healthcare professionals responsible for assisting women with POP, so that these specialists can confidently prescribe this therapy.

Pessaries were also cited as a first-line treatment option, as, among other advantages, they offer low cost and minimal risks. However, in clinical practice, treatment options are limited to what the patient can access. In this regard, the importance of creating public policies that enhance access to pessaries for the population, especially within the Unified Health System (SUS) for individuals with low purchasing power, is emphasized.

However, the aforementioned actions require the dissemination of healthcare indicators. Therefore, new research becomes imperative: epidemiological studies to investigate the current prevalence and profile of the population with pelvic organ prolapse; exploratory studies related to the costs of hospitalizations due to prolapse in Brazil; and randomized trials to assess the cost-benefit of pessaries compared to other therapies.

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