

# THE EFFECTIVENESS OF VAGINAL PESSARIES IN THE TREATMENT OF GENITAL DYSTOPIAS: AN INTEGRATIVE REVIEW

#### EFICACIA DE LOS PESARIOS VAGINALES EN EL TRATAMIENTO DE LAS DISTOPIAS GENITALES: UNA REVISIÓN INTEGRATIVA

#### A EFICÁCIA DOS PESSÁRIOS VAGINAIS NO TRATAMENTO DE DISTOPIAS GENITAIS: UMA REVISÃO INTEGRATIVA

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#### ABSTRACT

**Objective:** To describe the benefits and effectiveness of vaginal pessaries in the lives of women with pelvic organ prolapse. **Methods:** this is an integrative literature review, with a search in the following databases: the Nursing Database (BDENF), La Salud Science Bibliographic Index (IBECS), Latin American and Caribbean Literature on Science of the Health (LILACS), online medical Literature Analysis and Retrievel System (MEDLINE), accessed by the Virtual Health Library (VHL). **Results:** The collection took place in May 2021, resulting in 8 articles as the final sample. The results of the analyzed data show the benefits of the pessaries, which improve the quality of life and reduce the symptoms caused by genital dystopias and that this device can be used as a first line of treatment. **Final Considerations:** despite the benefits, there is still a lack of knowledge on the part of women and health professionals in the use of these pessaries, requiring greater qualification for this use and indication of use, so that it can become habitual in daily life clinical. **Keywords:** Pessary; Prolapse; Quality of Life; Gynecoly; Women's Health.

#### RESUMEN

**Objetivo:** describir los beneficios y la eficacia de los pesarios vaginales en la vida de mujeres con prolapso de órganos pélvicos. **Métodos:** se trata de una revisión integrativa de la literatura, con búsqueda en las siguientes bases de datos: Base de Datos de Enfermería (BDENF), Índice Bibliográfico de Ciencias de la Salud (IBECS), Literatura Latinoamericana y del Caribe en Ciencias de la Salud (LILACS), Literatura médica Sistema de Análisis y Recuperación en línea (MEDLINE), accedido por la Biblioteca Virtual en Salud (BVS). **Resultados:** La recolección se realizó en mayo de 2021, resultando 8 artículos como muestra final. Los resultados de los datos analizados muestran los beneficios de los pesarios, que mejoran la calidad de vida y disminuyen los síntomas causados por las distopías genitales y que este dispositivo puede ser utilizado como tratamiento de primera línea. **Consideraciones finales:** a pesar de los beneficios, aún existe un desconocimiento por parte de las mujeres y profesionales de la salud en el uso de estos pesarios, por lo que es necesario tener mayor capacitación para este uso e indicación de uso, para que pueda volverse habitual en la vida cotidiana clínica.

Palabras clave: Pesario; Prolapso; Calidad de Vida; Ginecología; la Salud de la Mujer.

#### RESUMO

**Objetivo:** descrever os benefícios e a eficácia dos pessários vaginais na vida das mulheres que apresentam prolapsos de órgãos pélvicos. **Métodos:** trata-se de uma revisão integrativa da literatura, com busca nas bases de dados: a Base de Dados de Enfermagem (BDENF), Índice Bibliográfico em Ciências da *La Salud* (IBECS), Literatura Latino-Americana e do Caribe em Ciência da Saúde (LILACS), medical Literature Analysis and Retrievel System online (MEDLINE), acessadas pela Biblioteca Virtual em Saúde (BVS). **Resultados:** A coleta deu-se em maio de 2021, resultando em 8 artigos como amostra final. Os resultados dos dados analisados mostram os benefícios dos pessários, que melhoram a qualidade de vida e diminuem os sintomas causados pelas distopias genitais e que esse dispositivo pode ser usado como primeira linha de tratamento. **Considerações Finais:** apesar dos benefícios, identifica-se ainda um desconhecimento por parte das mulheres e dos profissionais de saúde na utilização desses pessários, tornando-se necessário maior qualificação para essa utilização e indicação do uso, para que possa tornar-se habitual no cotidiano clínico. **Palavras-chave:** Pessário; Prolapso; Qualidade de Vida; Ginecologia; Saúde da Mulher.

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#### **INTRODUCTION**

Pessaries are low-cost and risky devices used as an alternative treatment for Pelvic Organ Prolapse (POP). POP is characterized by the descent of one or more pelvic organs through the vaginal canal. The function of this device is to support and support organs that are anatomically partially or completely outside the vagina. The acceptance of women who use it varies between 70 and 92%, so pessaries can be used as a first line of treatment<sup>1</sup>.

Pessaries are devices made of rubber or silicone that provide structural support and support to organs such as the uterus, vagina, bladder and rectum. Currently, there are several models and types on the market, so its acceptance by the public is greater. The choice of model is made through vaginal touch. The pessary is positioned behind the public symphysis, supported by the perineal body<sup>2</sup>.

There are several types of devices (ring, donut, gelhorn, cube) that are divided into two categories: support and occlusive. Supporting ones are ring, membrane ring and Shaatz. They do not fully occlude the vagina and support the pelvic organ. They are the most accepted by women, as they allow intercourse without having to remove the device. The occlusives are those that occlude the vagina and the most common models are donuts, gelhorn and ring. Because of this vaginal occlusion, it is necessary to remove it at the time of intercourse<sup>1</sup>.

The authors<sup>1</sup> carried out a study based on quality of life questionnaires. This research demonstrated improvements in sexual function and body image after starting treatment with

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pessaries. The same author carried out a bibliographic study comparing the effectiveness of two types of pessaries in two groups of women. Group A used ring pessaries (support) while group B used occlusive pessaries (gelhorn). After 3 months, these women changed the type of pessary used. This study found that both models are effective in relieving POP symptoms.

It is very important to clean the pessaries. The use of these devices can cause some complications such as bleeding, discharge, discomfort and vaginal pain, erosions, odor, purulent secretion and increased vaginal fluid<sup>3</sup>.

The authors<sup>4</sup> point out that the use of cervical pessary in the short uterine cervix and in singleton pregnancies has been gradually introduced in clinical practice, becoming the target of studies in the prevention of prematurity in women at high risk for prenatal delivery. term, that is, those with a short cervix or cervical incompetence. They also state that there are researches, studies and patient reports showing that the cervical pessary has gradually become an ally for pregnant women with uterine prolapse, but they point out that the facts are still being followed by many analyses.

Although the use of a pessary is an effective method with several indications, replacing, in many cases, surgical procedures and positively impacting women's quality of life, there is still a notorious lack of knowledge about its use in clinical practice, especially on the part of the population that has no ties to the health area.

Therefore, the study has great social relevance not only for health professionals, but

scientifically evidenced theoretical subsidies, which enables knowledge about the technique, strengthening and encouraging the use of these devices as an alternative to clinical care.

Thus, in order to encourage discussions on the topic, the aim of this study is to describe the benefits and effectiveness of pessaries as a conservative treatment for women with genital dystopias.

#### **METHODS**

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This article is an integrative review of the literature, described through bibliographic bases and with the focus and objective of identifying, synthesizing and analyzing research on a preestablished theme, in an organized and systematic way, contributing to the facilitation of the summary on a certain subject<sup>5</sup>.

The integrative review consists of six steps, namely: Definition of the leading question; Search or sampling in the literature; Data collect; Critical analysis of included studies; Discussion of the results and Presentation of the integrative review<sup>5</sup>. The question that led this study was asked to guide the research in databases, namely: What are the benefits and effectiveness of vaginal pessaries in women with pelvic organ prolapse?

Data collection took place in May 2021, using the following databases: the Nursing Database (BDENF), Bibliographic Index on Sciences of La Salud (IBECS), Latin American and Caribbean Literature on Health Science (LILACS), medical Literature Analysis and Retrievel System online



(MEDLINE), accessed by the Virtual Health Library (BVS). Controlled descriptors, conceived in the Descriptors in Health Sciences (DeCS), were used, thus identifying: "pessaries", "pelvic organ prolapse", "urinary incontinence".

To supplement the research, the Boolean operators AND and OR were applied, in multiple crossing, namely: Pessaries AND Pelvic organ prolapse (196 articles, 6 selected), Pessaries AND Cistocele, (12 articles, 1 selected), Pessaries AND incontinence urinary tract (230 articles, 1 selected).

The inclusion criteria adopted for the selection of studies were: scientific articles, available in full, published between the years 2016 to 2021, in Portuguese, English and Spanish. Articles with paid access, which did not contain abstracts in the databases or did not respond to the object of this study, were excluded.

For data analysis, a detailed reading of titles and/or abstract of each article found was performed, according to the chosen criteria, with full compliance with the guiding question, thus obtaining a final sample of 8 articles.

The level of evidence used to classify the types of studies was determined according to the Utilization-Focused Integrative Reviews in a Nursing Service: Level I - Meta-analysis of multiple controlled studies; Level II - Individual experimental studies; Level III - Quasi-experimental studies; Level IV - Non-experimental studies; Level V - Program evaluation data and systematically obtained data; Level VI - Expert opinions, experience reports, consensus, regulations and legislation.

# RESULTS

From the paired analysis of the articles, in order to better quantify the results and show compliance with the scope of this research, the total sample of this review is 8 articles, in the following databases: (2) BDENF, (1) IBECS and (2) LILACS (3) MEDLINE.

**Table 1.** Characterization of the articles included in the Integrative Review.

Author /	Article title	Objective	Study Methodology /	Journal /	Level of
Year			Country	Database	evidence
Barroso (2020)	The woman with pelvic floor hypotonia: needs in nursing care.	To understand the needs of rehabilitation nursing care in women with pelvic floor hypotonia.	Study with a qualitative, exploratory and descriptive approach/ Brazil.	POLYTECHNIC INSTITUTE OF VIANA DO CASTELO / BDENF	IV
Catunda (2016)	Construction and validation of a protocol for the use of a vaginal pessary.	To validate a clinical protocol for the treatment of dystopias with a vaginal pessary, and to assess the quality of this protocol.	Integrative Literature Review Study/ Brazil.	UNIVERSIDADE FEDERAL DO CEARÁ/LILACS	IV







Gómez DE quero. M, et al (2019)	Influence of regrets on the quality of life of women with pelvic organ prolapse.	Discover the quality of life of women who use pessaries.	Descriptive, retrospective and cross-sectional study/ Spain.	Revista ENFURO/ IBECS	IV
Catunda et al (2018)	Protocol for treating pelvic organ prolapse with a vaginal pessary.	To develop a clinical protocol for the conservative treatment of pelvic organ prolapse with a vaginal pessary.	Development research study/ Brazil.	Revista ACTA/BDENF	IV
Londoño et al (2020)	Use of weighing for pelvic organ prolapse during embarrassment: case series and literature review.	Demonstrate that pessaries are useful in controlling symptoms with few adverse effects and contraindications.	Literature review and case exposition/ Chile.	Revista CHILENA DE OBSTETRICIA E GINECOLOGIA / LILACS	VI
Adler et al (2019)	Prolapse surgery versus vaginal pessary in women with symptomatic pelvic organ prolapse: which factors infuence the choice of treatment?	To investigate which specific clinical factors influence patients' choice of prolapse treatment.	Observational study/ Austria	Revista ARCHIVES OF GYNECOLOGY AND OBSTETRICS/ MEDLINE	VI





Radnia et al (2019)	Patient Satisfaction and Symptoms Improvement in Women Using a Vginal Pessary for The Treatment of Pelvic Organ Prolapse.	Assess satisfaction and improvement of symptoms in patients using pessary vagina for the treatment of POP.	Prospective observational study/ Iran	Revista JOURNAL OF MEDICINE AND LIFE/ MEDLINE	VI
Hsieh et al (2019)	Long-term compliance of vaginal pessaries.	Investigate the factors that can affect the adherence of vaginal pessaries.	Retrospective, observational study/ Taiwan.	Revista MEDICINE/ MEDLINE	VI

Source: Own authorship (2021)

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#### DISCUSSION

The studies used to compose this integrative review address the importance of using vaginal pessaries for women with genital dystopias. Although the universe related to the use of these devices is still little investigated, from the analysis of the studies it was possible to perceive the importance of using pessaries as an alternative treatment for women suffering from pelvic organ prolapse, and the importance of health professionals to provide good assistance. Regarding the use of pessaries as a treatment for the descent of the pelvic organ, it was made explicit, through the analyzed literature, that currently there are few studies that address this issue.

According to the author<sup>6</sup>, POP is a disorder that significantly affects the quality of life (QoL) of people who suffer from this dystopia. POP is more frequent in women's lives and is mainly associated with vaginal delivery. There are some risk factors like obesity and menopause. Pelvic floor disorders have a devastating impact on the sexual function and mental health of these women. It affects their lifestyles and even alters their relationships with family and friends.

For auhor<sup>7</sup>, there are some factors that can influence the descent of the pelvic floor, such as parity, age, hysterectomy, urinary incontinence (UI), sexual and anorectal dysfunctions. During the use of the pessary, there is an improvement in urinary and fecal symptoms, sexual function, a decrease in the sensation of pelvic pressure, in addition to significantly improving QOL. The are low cost, bring a reduction of expenses in the Unified Health System (SUS), when faced with procedures that involve surgeries.

The authors<sup>8</sup> ensure that the use of pessaries is a very beneficial conservative treatment for patients. Especially those who cannot undergo surgery for various reasons, such as obesity or decompensated diabetes. With many devices on the market today, pessaries are durable and no longer cause a foul-smelling vaginal discharge. The authors report that complications are almost always related to patients' lack of adherence, follow-up and knowledge. It is essential to monitor the nursing team, at least every three months, thus avoiding possible complications.

Also according to the same authors, for good nursing care, a careful assessment is needed in order to establish an assertive diagnosis and intervention. Results obtained in a research carried out by them indicate that of the 25 patients studied, aged between 47 and 90 years, 76% showed good adherence to pessaries, 72.2% had improved quality of life and 22% denied any pain or discomfort. in coitus. Corroborating these data, the author<sup>7</sup> warns that the quality care offered to these women is essential to avoid possible complications, such as expulsion of the device from the body, discharge, odor or discomfort.

The authors studied defend the benefits of vaginal pessaries in the quality of life of users and the need for professional training to recognize pelvic signs and symptoms, indicate their use, manage them, differentiate the types

same author reports that the devices, because they available on the market, guide and monitor https://doi.org/10.31011/reaid-2022-v.96-n.37-art.1279 Rev Enferm Atual In Derme v. 96, n. 37, 2022 e-021212 7



patients. In view of this, it was considered necessary to create a protocol that guides health professionals from the indication, to the handling of the device and training for women with pelvic organ prolapse using a pessary, so that they can avoid complications and be successful in the adherence to this treatment.

According to the authors<sup>9</sup>, the existence of a clinical protocol can contribute to the guidance and standardization of insertion and follow-up consultations, promoting specific care, early detection of changes, minimizing complications, improving quality of life and enabling the direction and standardization of actions.

The construction and validation of a clinical protocol, given the relevance of the theme and for being an area still little known within nursing, will serve to disseminate and encourage nurses to apply this practice with assertiveness and safety<sup>9</sup>.

From this perspective, the creation of the protocol qualifies care for all women, including pregnant women. The author's estimate<sup>10</sup>, prolapse in pregnancy is rare, reported as one in 10,000 to 15,000 deliveries, and is mainly associated with multiparous women. Although the number of pregnant women with prolapse is minimal, it still exists and requires qualified care, which shows that the use of the device does not pose a risk to the pregnancy.

To prove the safety of using the device during pregnancy, four patients, all aged between 26 and 37 years, in second pregnancy and with a history of prolapses, were followed up while



prolapse during pregnancy. pregnancy. The 4 patients reported improvement in symptoms, better quality of life and safety. Regarding complaints, they reported only mild discomfort.

The authors<sup>11</sup> conducted a study based on the following question: what clinical factors contribute to the choice of pessary as an alternative treatment for pelvic organ prolapse. This study was carried out with 510 patients who had symptoms of POP. This investigation was carried out at the Department of General Gynecology and Gynecological Oncology at the Medical University of Vienna (MUV) between January 2013 and January 2018. An anamnesis and physical examination were performed on each patient who participated in this study.

Also according to the authors, about 252 women (49%) opted for surgery and 258 (51%) chose pessaries. Women who chose treatment with pessaries used the ring, cube or donut model. All were followed up every three or four months by the health team. The women who opted for surgery were young, had higher signs of POP and were non-smokers. The clinical factors that contributed to the choice of device were associated with hypertension or chronic obstructive pulmonary disease (COPD). For the authors, the patient's autonomy in the choice of treatment must be respected and taken into account.

For the author's<sup>12</sup> pelvic organ prolapse is a pathology associated more with elderly women. Therefore, the authors advocate the use of pessaries for patients who have chronic diseases, such as hypertension. Patients with

using a pessary, due to an event of pelvic organheart disease or with a history of acutehttps://doi.org/10.31011/reaid-2022-v.96-n.37-art.1279 Rev Enferm Atual In Derme v. 96, n. 37, 2022 e-0212128



myocardial infarction. The authors performed a study involving 68 patients, who used pessaries and were followed up on a long-term basis. These women were submitted, after clinical and anatomical evaluations, to the use of cube, ring and gelhorn pessaries.

The advantages pointed out by the patients were that this is a reversible, accessible treatment that does not cause very aggravating complications. The disadvantages were linked to urinary incontinence and the need for routine follow-up with the health team. 82% of patients were very satisfied with the treatment and reported improvement in symptoms.

For the author's<sup>13</sup> long-term pessary treatment seems to be more acceptable for elderly patients. For it is expected that the prevalence of prolapses will increase due to aging. So a study was carried out among women of different age groups to assess the long-term adherence of vaginal pessaries. According to the author's<sup>13</sup> the final analysis of the study included 65 patients; 50 of them continued vaginal pessary treatment (the adherent group) at the end of the study period, while 15 patients dropped out (the nonadherent group). Baseline characteristics were similar between the 2 groups, except that the age of women was younger in the non-adherent group than in the adherent group.

The study reveals that long-term use with a vaginal pessary is safe and effective, and even more acceptable in elderly patients. However, treatment with the devices is also effective in younger women and they should be chosen as the first line of intervention. So since pessaries are so effective, the authors' study

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sought to identify factors that may affect longterm use, with the result that the main reason is severe stress urinary incontinence (SUI) after POP reduction, which may decrease the adherence in longer terms of the use of vaginal pessaries<sup>13</sup>.

When reviewing the evidence, there are reports of the benefits of vaginal pessaries and their effectiveness for women of all ages with prolapses. According to the data, its use improves the quality of life and reduces the symptoms of dystopias. The need for qualified professional follow-up to minimize complications is validated. Therefore, it is up to professionals to effectively manage conservative treatment with a pessary, which serves to raise the quality of care indicators and guide health care, based on scientific evidence.

#### FINAL CONSIDERATIONS

Based on the material analyzed on the use of vaginal pessaries in the treatment of Pelvic Organ Prolapse, it is clear that these devices are indeed a very beneficial alternative treatment for women with pelvic floor dysfunction and are more cost-effective compared to procedures surgical. They are made of strong and durable material.

Through this research, it was evidenced that, although pessaries have many advantages, there is still a large gap both in health professionals and the users themselves with regard to their service, choice for the use and handling of the device. Therefore, it is necessary to direct the continuing education of



professionals to this care practice. It is suggested, therefore, the awakening to training in this area.

It is also advisable to carry out further research on vaginal pessaries in genital dystopias. The lessons learned from this study are validated for the authors, despite the recognition of its weaknesses.

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