# **Evaluation of a Non-Hormonal Centella Asiatica-based Vaginal Gel as a Treatment for Vaginal Lesion Caused by Pessary**

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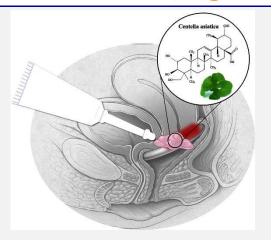


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#### **ABSTRACT**

A 79-year-old, non-smoker patient with arterial hypertension and dyslipidemia visited the institute for pessary replacement. The patient had a history of pregnancy once, no abortion, and a child. Vulvar examination showed external atrophic genitalia. The colposcopy image showed an ulcer on the right side with active bleeding of about 2 cm in the patient's vagina due to the pessary usage. A non/hormonal Centella Asiatica-based vaginal gel (Palomacare®) is used as a treatment for the ulcer applied every 12 hours for 3 weeks. After 3 weeks of using Palomacare®, the lesion was cured (the ulcer and erosion disappeared) and then stopped the bleeding. The pessary was placed again inside the patient's vagina without any incidence. Using Palomacare® for 3 weeks showed promising wound healing. reepithelization result for the lesion caused by using a pessary.



**Keywords:** Centella Asiatica, non-hormonal, vaginal gel

#### 1. Introduction

Pelvic organ prolapse (POP) is a common disorder in postmenopausal women. This disease is characterized by the fall of one or more parts of the bladder, ovaries, uterus, or post-hysterectomy vaginal cuff [1]. By 2050, it is predicted that there will be a 50% rise in the proportion of women who have POP in varying degrees [1,2]. Even while POP is not a lethal condition, the myriad of symptoms it causes, have a significant negative impact on women's quality of life [2]. A conservative treatment for POP is the vaginal pessary. The vaginal pessary can be used as the first-line care in all women with troublesome symptoms of POP who do not wish to have surgery or who have a contraindication to having surgery [3]. With a high subjective satisfaction rate of up to 92% [4], the efficacy rate of pessary usage for POP is up to 73–91.8% [4,5].

Vaginal pessaries, however, may also cause negative effects such vaginal ulceration, vaginal discharge, vaginal discomfort, and vaginal bleeding, which may force users to stop using the pessaries and cause serious adverse events [4,6]. The complication rates of pessaries in various studies range from 11% to 56% and can even go as high as 73%, according to the literature [5]. In this study, we reported the case of a 79-year-old patient with a vaginal lesion caused by a doughnut pessary usage, which was treated with non-hormonal Centella Asiatica-based vaginal gel (Palomacare®, Procare Health S.L., Spain).

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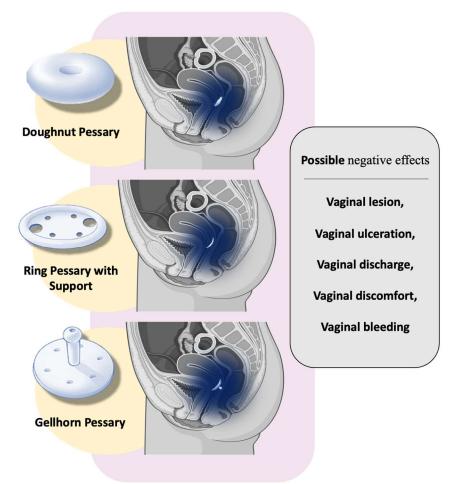


Figure 1. Pessary types and their possible negative effects

#### 2. Methods

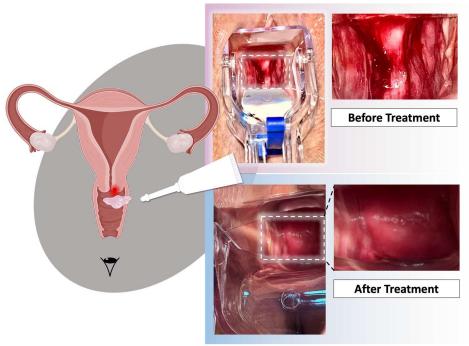
### 2.1. Patient

A 79-year-old, non-smoker patient with arterial hypertension and dyslipidemia visited the institute (Severo Ochoa University Hospital, 28003 Madrid, Spain) for pessary replacement. The patient had a history of pregnancy once, no abortion, and a child (G1P1AoL0D0). Vulvar examination showed external atrophic genitalia. The colposcopy image showed an ulcer on the right side with active bleeding of about 2 cm in the patient's vagina due to the pessary usage. Weekly pessary care including removing, cleaning, and re-inserting was recommended. The patient managed to return for follow-up at 3- and 6-month intervals during the first year of treatment, and then lost to follow-up thereafter.

#### 2.2. Treatment and evolution

After the medical examination, the pessary was removed, and the patient is told to stop using the pessary. A non-hormonal vaginal gel, Palomacare<sup>®</sup>, was prescribed as a treatment for the ulcer, applied every 12 hours for 3 weeks. This gel, which has been given medical device approval in Spain, contains hyaluronic acid, beta-glucan, Centella Asiatica, aloe vera, and Bioecolia<sup>®</sup> as a prebiotic. Noisome encapsulation of some ingredients enables them to penetrate the mucosa more effectively [7]. This vaginal gel with moisturizing and lubricating properties also has a potent repairing function due to the action of the Centella Asiatica, which accelerates the healing of atrophic or damaged cervicovaginal mucosa [8–13]. In addition, thanks to Bioecolia<sup>®</sup>, the product maintains the balance of vaginal microbiota.

After 3 weeks of using Palomacare<sup>®</sup>, the lesion was cured (the ulcer and erosion disappeared) and then stopped the bleeding. The pessary was placed again inside the patient's vagina without any incidence. Using Palomacare<sup>®</sup> for 3 weeks showed a promising wound healing reepithelization result for the lesion caused by using pessary (**Figure 2**).



**Figure 2.** Colposcopy observation of the lesion caused by pessary before and after the treatment with the non-hormonal Centella Asiatica-based vaginal gel

#### 4. Conclusions

In conclusion, the Centella Asiatica-based vaginal gel (Palomacare®) used in this study indicated a pleasant application and a well-tolerated material. Due to its unique features, we found this vaginal gel to be satisfying and preferred it to other prior treatments. In addition, using this non-hormonal Centella Asiatica-based vaginal gel showed promising wound healing after 3 weeks of use as a treatment for reepithelization of the lesion caused by using a pessary. The author highly recommends further studies with a higher sample population.

### **Authors' contributions**

Author contributed to data analysis, drafting and revising of the paper and agreed to be responsible for all the aspects of this work.

## **Declaration of competing interest**

The author declare no competing interest.

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# **Data availability**

Data will be made available on request.

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