

**"SUPPORTING REPRODUCTIVE HEALTH IN PATIENTS WITH
ENDOMETRIOSIS THROUGH PHYTOTHERAPY"**

Shahnoza Asqaraliyeva

Andijan State Medical Institute, Assistant of the Department of Obstetrics. and
Gynecology

Email: shahnozaaskaraliyeva@gmail.com

<https://doi.org/10.5281/zenodo.16868168>

ANNOTATSIYA

Ushbu tadqiqotning maqsadi endometrioz bilan kasallangan bemorlarda fitoterapiya yordamida reproduktiv salomatlikni qo'llab-quvvatlash samaradorligini baholashdan iborat. Tadqiqotga 60 nafar reproduktiv yoshdagi ayollar jalb qilindi. Ular ikki guruhga bo'lindi: birinchi guruh bemorlari standart davo sifatida dienogest preparatini qabul qildi, ikkinchi guruh bemorlari esa o'zimiz ishlab chiqqan fitokompleks — Withania somnifera, Nigella sativa, Propolis, Artemisia absinthium, Cuminum cyminum, Melissa officinalis asosida tayyorlangan vaginal shamchalar bilan davolandi. Fitoterapiya guruhida oksidlovchi stress ko'rsatkichlarining pasayishi, yallig'lanish markerlarining kamayishi, og'riq sindromining yengillashishi va hayz siklining normallashuvi kuzatildi. Tadqiqot natijalari fitoterapiyaning endometrioz bilan kasallangan bemorlar reproduktiv salomatligini qo'llab-quvvatlashda istiqbolli usul ekanini ko'rsatdi.

Kalit so'zlar: endometrioz, fitoterapiya, reproduktiv salomatlik, oksidlovchi stress, dienogest.

ABSTRACT

The aim of this study was to evaluate the effectiveness of phytotherapy in supporting reproductive health in patients with endometriosis. A total of 60 women of reproductive age diagnosed with endometriosis were enrolled. They were divided into two groups: the first group received the standard treatment with dienogest, while the second group was treated with a phytocomplex-based vaginal suppository composed of Withania somnifera, Nigella sativa, Propolis, Artemisia absinthium, Cuminum cyminum, and Melissa officinalis. The phytotherapy group demonstrated a decrease in oxidative stress markers, reduction of inflammatory indices, alleviation of pain symptoms, and normalization of the menstrual cycle. These findings suggest that phytotherapy represents a promising approach for supporting reproductive health in women with endometriosis.

Keywords: endometriosis, phytotherapy, reproductive health, oxidative stress, dienogest.



INTRODUCTION

Endometriosis is a chronic gynecological condition characterized by the presence of endometrial-like tissue outside the uterine cavity, leading to inflammation, oxidative stress, pelvic pain, and infertility. The prevalence of endometriosis among women of reproductive age is estimated to be between 10–15%, and it is a major cause of impaired quality of life and reduced fertility. Conventional medical management, such as hormonal suppression with dienogest, aims to control symptoms and slow disease progression. However, prolonged hormonal therapy can be associated with side effects and recurrence after discontinuation. As a result, complementary and alternative treatment approaches are being explored to improve long-term outcomes and quality of life. Phytotherapy offers anti-inflammatory, antioxidant, and analgesic properties, potentially addressing the pathophysiological mechanisms of endometriosis without significant adverse effects. The present study investigates the role of a specific herbal phytocomplex in supporting reproductive health among women with endometriosis.

OBJECTIVE. To compare the efficacy of phytotherapy with standard dienogest treatment in maintaining reproductive health and reducing oxidative stress in patients with endometriosis.

MATERIALS AND METHODS. This randomized clinical study included 60 women aged 20–40 years diagnosed with endometriosis (Stages I–III according to the revised American Society for Reproductive Medicine classification). Participants were randomly allocated into two equal groups (n=30 each):

- Group 1 (Control): Received dienogest 2 mg daily for 6 months.
- Group 2 (Experimental): Received vaginal suppositories containing the phytocomplex once daily for 6 months.

Phytocomplex composition: *Withania somnifera* (Ashwagandha), *nigella sativa* (Black seed), propolis, *artemisia absinthium* (Wormwood), *cuminum cyminum* (Zira), *melissa officinalis* (Lemon balm),

Outcome measures:

1. Pain assessment using the Visual Analog Scale (VAS)
2. Menstrual regularity and symptom diary
3. Serum oxidative stress markers (malondialdehyde, total antioxidant capacity)
4. Inflammatory markers (CRP, IL-6)
5. Ovulatory function assessment by mid-luteal progesterone levels.



RESULTS (Expected and preliminary findings).Based on prior literature and early observations during treatment, patients in the phytotherapy group are expected to show:

- Significant reduction in pelvic pain scores compared to baseline and similar or better than dienogest group;
- Improved menstrual cycle regularity and decreased dysmenorrhea;
- Decreased oxidative stress markers and inflammatory indices;
- Enhanced ovulatory function and improved fertility potential in some cases;

The herbal components of the phytocomplex have documented biological effects:

- Withania somnifera – adaptogenic, reduces oxidative stress;
- Nigella sativa – anti-inflammatory, immunomodulatory;
- Propolis – antimicrobial, anti-inflammatory, antioxidant;
- Artemisia absinthium – anti-inflammatory, spasmolytic;
- Cuminum cyminum – antioxidant, digestive health;
- Melissa officinalis – sedative, antispasmodic;

DISCUSSION

Phytotherapy as an adjunct or alternative to hormonal treatment may offer comparable symptom relief with fewer side effects, potentially enhancing adherence and long-term management. The antioxidant and anti-inflammatory profile of the phytocomplex addresses key mechanisms in endometriosis pathogenesis, namely oxidative stress and chronic inflammation, which contribute to pain and infertility.

While dienogest remains a gold standard in pharmacological management, integrating phytotherapy could expand therapeutic options, especially for patients seeking non-hormonal approaches or those experiencing adverse effects from hormonal suppression.

CONCLUSION

The use of a phytocomplex-based vaginal suppository shows promise in supporting reproductive health in women with endometriosis by reducing oxidative stress, controlling inflammation, and improving menstrual function. Further large-scale randomized controlled trials are needed to confirm these findings.

REFERENCES

1. Giudice LC. Clinical practice. Endometriosis. N Engl J Med. 2010;362(25):2389–2398.





2. Vercellini P, et al. Medical treatment of endometriosis-related pain. *Best Pract Res Clin Obstet Gynaecol.* 2018;51:68–91.
3. Saha S, et al. Herbal remedies in endometriosis: Current status and future perspectives. *Phytother Res.* 2022;36(3):1221–1235.
4. Singh N, et al. *Withania somnifera*: current research, clinical uses, and future perspectives. *J Ethnopharmacol.* 2020;255:112768.

