Role of Conservative Management in Endometriosis Patient

Nigar Sultana[1], Ayesha Mehnaz[2], Kazi Farhana Begum[3], Taassum Parveen[4], Khodeza Khatun[5*], Mehera Parveen[6], Hasna Hena Pervin[7]

ARTICLE INFO

Received: 4 Apr 2026
Accepted: 10 Apr 2026
Published Online:

DOI: 10.5281/zenodo.19486241

Volume: 9, Number: 2, Page: 107-111

e-ISSN: 2789-5912
ISSN: 2617-0817

*Corresponding author

ABSTRACT

Background: Endometriosis is a chronic gynecological disorder characterized by ectopic endometrial tissue causing pelvic pain, dysmenorrhea, and infertility. Conservative management aims to control symptoms and preserve reproductive function without surgical intervention. Aim of the study: To evaluate the effectiveness of conservative management in patients with endometriosis with regard to symptom relief, disease control, and improvement in quality of life. **Methods & Materials**: This prospective observational study was conducted in the outdoor Department of Obstetrics and Gynaecology, Bangladesh Medical University and Universal Medical College Hospital, Dhaka, Bangladesh from July 2024 to June 2025. A total of 50 women aged 18–45 years diagnosed with endometriosis were enrolled using purposive sampling. All patients received conservative management including NSAIDs, hormonal therapy (oral contraceptives or progestins), and GnRH analogues when indicated. Clinical symptoms and quality of life were assessed using the Visual Analog Scale (VAS) and SF-36 questionnaire at baseline, 3 months, and 6 months. Statistical analysis was performed using SPSS version 26, with $p \leq 0.05$ considered statistically significant. **Result**: The mean age of participants was 31.2 ± 5.6 years. Dysmenorrhea (84%) and chronic pelvic pain (70%) were the most common presenting symptoms. Significant improvement was observed in dysmenorrhea (VAS 7.2 ± 1.1 to 3.1 ± 1.0), chronic pelvic pain (6.5 ± 1.3 to 2.9 ± 1.0), and dyspareunia (5.8 ± 1.5 to 3.0 ± 1.1) over six months ($p<0.001$). Quality-of-life scores increased from 55.2 ± 8.5 to 71.5 ± 6.8 ($p<0.001$). Patient satisfaction was reported in 80% of cases, while only 8% required surgical intervention. **Conclusion**: Conservative management is an effective approach for reducing symptoms and improving quality of life in patients with endometriosis. It may serve as a valuable first-line treatment strategy, particularly for women seeking fertility preservation and in settings with limited surgical resources.

Keywords: *Endometriosis; Conservative management; Dysmenorrhea; Chronic pelvic pain; Hormonal therapy; Quality of life.*

1. *Associate Professor, Department of Obstetrics and Gynaecology, Bangladesh Medical University, Dhaka, Bangladesh (ORCID: 0009-0003-5076-1529)*
2. *FCPS part-2 Coarse, Medical Oncology, Ex trainee Medicine department, Dhaka Medical college, Dhaka, Bangladesh*
3. *Associate Professor, Department of Obstetrics and Gynecology, Bangladesh Medical University, Dhaka, Bangladesh*
4. *Professor and Chairman, Department Feto-maternal Medicine, Bangladesh Medical University, Dhaka, Bangladesh*
5. *Associate Professor, Department of Obstetrics and Gynecology, Bnagladesh Medical University, Dhaka, Bangladesh (ORCID: 0009-0007-4935-3201)*
6. *Associate Professor, Department of Gynecological Oncology, Bangladesh Medical University, Dhaka, Bangladesh*
7. *Associate Professor, Department of Obstetrics and Gynecology, Bangladesh Medical University, Dhaka, Bangladesh*

INTRODUCTION

Endometriosis is defined as a chronic gynecological disorder characterized by the presence of endometrial-like tissue outside the uterine cavity, which leads to inflammation, pelvic pain, and infertility [1]. Globally, endometriosis affects approximately 10% of women of reproductive age [2]. In Bangladesh, the prevalence rate is about 25-50% of infertile women undergoing diagnostic laparoscopy are diagnosed with endometriosis [3]. The process of conservative management focuses on controlling symptoms and preserving fertility without the surgical removal of reproductive organs. It works through a multimodal therapeutic approach aimed at suppressing hormonal stimulation and reducing inflammation. Hormonal agents such as progestins and gonadotropin-releasing hormone (GnRH) agonists are commonly used to induce a hypoestrogenic state, which helps shrink ectopic endometrial lesions and reduce disease activity. This hormonal suppression limits estrogen-dependent proliferation of endometrial tissue and alleviates associated pelvic pain [2,4]. In addition to hormonal therapy, medical treatment frequently includes non-steroidal anti-inflammatory drugs for pain relief, combined oral contraceptives to regulate menstrual cycles, and progestins to inhibit endometrial growth [5,6]. The impact of conservative treatment is significant because endometriosis can cause chronic pelvic pain, dysmenorrhea, dyspareunia, and infertility, which often impair physical health and psychological well-being [3,7]. Conservative treatment has both advantages and disadvantages. One of the main advantages is that it preserves reproductive organs, improves the quality of life, and avoids the risks associated with surgical procedures. Hormonal therapy may also effectively reduce symptoms and slow disease progression in many patients [8]. Additionally, conservative approaches may lower healthcare costs and improve long-term disease management in many patients [5,9]. Nevertheless, recurrence of symptoms after discontinuation of therapy remains a challenge, and some patients may experience adverse effects such as weight gain, mood changes, or irregular bleeding [4,10]. Studying conservative management in endometriosis is important because the disease is often underdiagnosed and associated with delayed treatment. Early identification and appropriate medical therapy may prevent disease progression and reduce complications related to chronic inflammation and infertility [2,11]. Furthermore, conservative therapy may be particularly relevant in developing countries where access to advanced surgical treatment is limited [11]. Despite increasing endometriosis research, several limitations remain in the existing literature. Many studies have been conducted in developed countries, and their findings may not fully reflect the clinical characteristics of patients in developing regions. In addition, differences in diagnostic criteria, disease staging, and treatment protocols have led to variability in reported outcomes [5,12]. Therefore, there is a clear need for this research to evaluate the effectiveness of conservative management in different healthcare settings. Such studies may provide valuable information for improving treatment strategies and clinical decision-

making. The study aimed to evaluate the role and clinical outcomes of conservative management in patients with endometriosis, with particular emphasis on symptom relief, disease control, and quality-of-life improvement.

METHODS & MATERIALS

This study was conducted in the *outdoor* Department of Obstetrics and Gynaecology, Bangladesh Medical University and Universal Medical College Hospital, Dhaka, Bangladesh from July 2024 to June 2025. The study spanned 1 year, focusing on patients diagnosed with endometriosis. Using a purposive sampling method, a total of 50 patients attending the department were enrolled, forming a clearly defined study cohort. Participants were selected based on strict inclusion criteria to ensure the study's validity and clinical relevance.

Inclusion Criteria

- Women aged 18–45 years diagnosed with endometriosis.
- Patients presenting with symptoms such as dysmenorrhea, chronic pelvic pain, dyspareunia, infertility, or menstrual irregularities.
- Patients who agreed to undergo conservative (non-surgical) management.
- Patients willing to participate and provide informed consent.

Exclusion Criteria

- Patients requiring immediate surgical intervention.
- Presence of suspected pelvic malignancy.
- Patients with severe systemic diseases affecting treatment outcomes.
- Pregnant women or those planning immediate conception during the study period.
- Patients unwilling to participate or lost to follow-up.

Data Collection

Data were systematically gathered using a structured and validated questionnaire. The key variables assessed included age, BMI, socioeconomic status, smoking history, family history of endometriosis, clinical symptoms (dysmenorrhea, chronic pelvic pain, dyspareunia, infertility, menstrual irregularities), and duration of symptoms. Diagnostic investigations such as pelvic ultrasonography, MRI, and laparoscopic confirmation when indicated were performed to identify ovarian cysts, endometriomas, and deep infiltrating endometriosis.

All patients received conservative management, which included NSAIDs, hormonal therapy (combined oral contraceptives or progestins), and gonadotropin-releasing hormone (GnRH) analogues in selected cases. Some patients also received combined approaches including lifestyle modification and supportive management. The average duration of therapy was 6 months. Symptom severity was assessed using the Visual Analog Scale (VAS) for dysmenorrhea, chronic pelvic pain, and dyspareunia at baseline, 3 months, and 6 months. Quality of life was evaluated using the SF-36 questionnaire, and treatment adherence, complications, need for surgical intervention, and patient satisfaction were documented during follow-up.

Statistical Analysis

Statistical analyses were performed using SPSS software (version 26). Continuous variables were expressed as mean± (SD), while categorical variables were summarized as frequencies and percentages. For comparisons of quantitative variables over time, paired t-tests were applied, whereas the chi-square test was used for categorical variables. A p-value ≤0.05 was considered statistically significant.

RESULT

Table I presented that the mean age of the patients was 31.2±5.6 years. The majority of participants were aged 25–34 years (56.00%), followed by ≥35 years (28.00%), while 16.00% were younger than 25 years. The mean BMI was 23.5±2.8 kg/m². Regarding socioeconomic status, 40.00% of the participants belonged to the low-income group. Smoking history was reported by 10.00% of patients, while 14.00% had a family history of endometriosis.

Table I
Baseline Demographic Characteristics of Study Participants (n = 50).

Characteristics	Frequency (n)	Percentage (%)
Age (years), Mean ± SD	31.2 ± 5.6	
<25	8	16.00
25–34	28	56.00
≥35	14	28.00
BMI (kg/m²), Mean ± SD	23.5 ± 2.8	
Low-income status	20	40.00
Smoking history	5	10.00
Family history of endometriosis	7	14.00

The most common symptom was dysmenorrhea (84.00%), followed by chronic pelvic pain (70.00%). Menstrual irregularity was present in 50.00% of patients, while dyspareunia was reported by 40.00%. Infertility was noted in 36.00% of cases. Additionally, 56.00% of patients had a duration of symptoms greater than one year (*Table II*).

Table II
Clinical Presentation of Endometriosis Patients.

Clinical Variables	Frequency (n)	Percentage (%)
Dysmenorrhea	42	84.00
Chronic pelvic pain	35	70.00
Dyspareunia	20	40.00
Infertility	18	36.00
Menstrual irregularity	25	50.00
Duration of symptoms >1 year	28	56.00

Ultrasound-detected ovarian cysts were identified in 60.00% of patients, representing the most frequent imaging finding. Laparoscopic confirmation of endometriosis was achieved in 70.00% of cases. Endometrioma size greater than 3 cm was found in 36.00%, while deep infiltrating endometriosis was detected in 24.00%. MRI-confirmed lesions were observed in 20.00% of patients (*Table III*).

Table III
Diagnostic and Imaging Findings.

Findings	Frequency (n)	Percentage (%)
Ultrasound-detected ovarian cyst	30	60.00
Deep infiltrating endometriosis	12	24.00
Endometrioma size >3 cm	18	36.00
MRI-confirmed lesions	10	20.00
Laparoscopic confirmation	35	70.00

The majority of patients received NSAIDs (80.00%), followed by hormonal therapy including oral contraceptives or progestins (76.00%). GnRH analogues were used in 30.00% of cases, while 40.00% of patients underwent a combined approach involving medical therapy and lifestyle modification. The mean duration of therapy was 6 ± 0 months (*Table IV*).

Table IV
Conservative Management Approaches Used.

Treatment Modality	Frequency (n)	Percentage (%)
NSAIDs	40	80.00
Hormonal therapy (OCs/Progestins)	38	76.00
GnRH analogues	15	30.00
Combined approach (medical + lifestyle)	20	40.00
Duration of therapy (months), Mean ± SD	6 ± 0	

The mean dysmenorrhea score (VAS) decreased significantly from 7.2±1.1 at baseline to 4.5±1.2 at 3 months and 3.1±1.0 at 6 months ($p<0.001$). Similarly, chronic pelvic pain scores improved from 6.5±1.3 at baseline to 4.2±1.1 at 3 months and 2.9±1.0 at 6 months ($p<0.001$). Dyspareunia scores also declined from 5.8±1.5 at baseline to 4.1±1.2 at 3 months and 3.0±1.1 at 6 months ($p < 0.001$). The infertility rate decreased from 36% at baseline to 30% at 3 months and 26% at 6 months ($p=0.04$). Furthermore, the quality-of life score (SF-36) improved from 55.2±8.5 at baseline to 64.3±7.2 at 3 months and 71.5±6.8 at 6 months ($p < 0.001$) (*Table V*).

Table V
Symptom Improvement Over 6 Months.

Outcome Measure	Baseline (Mean ± SD)	3 Months (Mean ± SD)	6 Months (Mean ± SD)	P value
Dysmenorrhea (VAS 0–10)	7.2 ± 1.1	4.5 ± 1.2	3.1 ± 1.0	<0.001
Chronic pelvic pain (VAS 0–10)	6.5 ± 1.3	4.2 ± 1.1	2.9 ± 1.0	<0.001
Dyspareunia (VAS 0–10)	5.8 ± 1.5	4.1 ± 1.2	3.0 ± 1.1	<0.001
Infertility rate, n (%)	18 (36)	15 (30)	13 (26)	0.04
Quality of life score (SF-36)	55.2 ± 8.5	64.3 ± 7.2	71.5 ± 6.8	<0.001

Medication-related side effects were reported by 16% of patients, while 10% discontinued therapy. Surgical intervention following conservative management was required in 8% of cases. Overall, 80% of patients reported being satisfied or very satisfied with the conservative management approach (*Table VI*).

Table VI
Complications and Treatment Adherence.

Characteristics	Frequency (n)	Percentage (%)
Medication side effects	8	16
Therapy discontinuation	5	10
Need for surgical intervention after conservative management	4	8
Patient satisfaction (satisfied/very satisfied)	40	80

DISCUSSION

Endometriosis is a chronic gynecological disorder affecting women of reproductive age and is commonly associated with pelvic pain, dysmenorrhea, dyspareunia, and infertility. Conservative management remains the first-line therapeutic approach in many patients, particularly those who wish to preserve fertility or avoid surgical intervention [13]. The present study evaluated the clinical characteristics of endometriosis patients and assessed the effectiveness of conservative management strategies over a six-month follow-up period. In this study, the mean age of the participants was 31.2 ± 5.6 years, with the majority (56%) belonging to the 25–34 years age group. This finding is consistent with previous studies reporting that endometriosis is most prevalent among women in their reproductive years. Similar demographic patterns were reported by Muteshi et al., who noted that the disease commonly affects women aged 23–44 years due to active hormonal cycles and reproductive factors [14]. Additionally, the mean BMI in our study was 23.5 ± 2.8 kg/m², which falls within the normal range, supporting previous observations that endometriosis frequently occurs in women with relatively normal BMI profiles [15]. Regarding socioeconomic and lifestyle factors, 40% of patients belonged to a low-income group, while 10% had a history of smoking, and 14% reported a family history of endometriosis. These findings align with earlier research suggesting that genetic predisposition and environmental factors may contribute to disease susceptibility. Previous studies have demonstrated that family history significantly increases the risk of developing endometriosis, indicating a strong genetic component to the disease [16-18]. The clinical presentation observed in this study is consistent with the well-

established symptom profile of endometriosis. Dysmenorrhea (84%) was the most common symptom, followed by chronic pelvic pain (70%), menstrual irregularity (50%), dyspareunia (40%), and infertility (36%). These findings are comparable to the work of Vercellini et al., who reported dysmenorrhea and chronic pelvic pain as the predominant symptoms in women with endometriosis [19]. Imaging and diagnostic findings in the current study revealed that 60% of patients had ultrasound-detected ovarian cysts, while 24% had deep infiltrating endometriosis, and 36% had endometriomas larger than 3 cm. Laparoscopic confirmation was obtained in 70% of cases, which remains the gold standard for diagnosis. These findings are consistent with previous literature indicating that transvaginal ultrasound is a reliable first-line diagnostic modality for ovarian endometriomas, while laparoscopy is used for definitive diagnosis and staging [20]. The present study also evaluated various conservative management approaches. NSAIDs were used in 80% of patients, hormonal therapy in 76%, and GnRH analogues in 30%, while 40% received a combined medical and lifestyle modification approach. Current clinical guidelines similarly recommend NSAIDs and hormonal therapy as the first-line treatment for symptom control in endometriosis patients. Hormonal therapies, including combined oral contraceptives and progestins, have been widely shown to suppress ovulation and reduce endometrial proliferation, thereby alleviating pain symptoms. Several studies have demonstrated that hormonal treatments significantly reduce dysmenorrhea and pelvic pain and improve overall quality of life in patients with endometriosis [21-23]. The effectiveness of conservative management in the present study was evident through the significant improvement in pain scores over six months. The mean VAS score for dysmenorrhea decreased from 7.2 ± 1.1 at baseline to 3.1 ± 1.0 at six months ($p < 0.001$). Similarly, chronic pelvic pain decreased from 6.5 ± 1.3 to 2.9 ± 1.0, and dyspareunia improved from 5.8 ± 1.5 to 3.0 ± 1.1. These findings correspond with previous randomized trials demonstrating significant pain reduction following hormonal therapy and GnRH analogue treatment. Evidence suggests that medical therapy can significantly reduce endometriosis-associated pain by suppressing estrogen-dependent endometrial tissue activity [23-25]. Another important finding of the study was the improvement in quality of life scores, which increased from 55.2 ± 8.5 at baseline to 71.5 ± 6.8 after six months ($p < 0.001$). Similar improvements have been reported in studies evaluating conservative treatment outcomes, where medical therapy significantly improved quality of life and reduced symptom burden in women with endometriosis [26]. In terms of fertility outcomes, the infertility rate decreased from 36% at baseline to 26% after six months, indicating a modest improvement following conservative management. While medical therapy is primarily aimed at symptom control, some studies have suggested that hormonal suppression may improve reproductive outcomes in selected patients, although evidence remains variable [27]. The safety and tolerability profile observed in the current study was acceptable. Medication side effects occurred in 16% of patients, therapy discontinuation in 10%, and only 8% required surgical intervention after conservative treatment. Furthermore, 80% of patients reported satisfaction with the treatment, indicating good overall acceptance of conservative management. Similar adherence patterns have been observed in previous studies where hormonal therapy showed moderate side effects but remained well tolerated by most patients [28].

LIMITATIONS

This study had several limitations. First, the sample size was relatively small and conducted in a single tertiary care center, which may limit the generalizability of the findings to the broader population. Second, the follow-up period of six months was relatively short for evaluating long-term recurrence or sustained symptom control. Third, the absence of a comparison group receiving surgical management limited the ability to directly compare treatment outcomes. Additionally, patient-reported outcomes such as pain scores may be subject to subjective variation.

CONCLUSION

Conservative management plays a significant role in the treatment of endometriosis, particularly for women who wish to preserve fertility and avoid surgical intervention. In this study, medical therapy consisting of hormonal agents, NSAIDs, and supportive lifestyle modifications resulted in significant improvement in key symptoms such as dysmenorrhea, chronic pelvic pain, and dyspareunia over a six-month follow-up period. Quality of life also improved substantially, while the majority of patients reported high treatment satisfaction. Only a small proportion of patients required surgical intervention after conservative therapy. These findings indicate that conservative management can be an effective and safe first-line treatment option for many patients with endometriosis, particularly in resource-limited healthcare settings where access to advanced surgical care may be restricted.

FUNDING

No funding sources

CONFLICT OF INTEREST

None declared

ETHICAL APPROVAL

The study was approved by the Institutional Ethics Committee.

REFERENCES

1. Giudice LC, Kao L. Endometriosis. TL-364. Lancet. 2004;364(9447):1789-99.
2. Horne AW, Missmer SA. Pathophysiology, diagnosis, and management of endometriosis. bmj. 2022 Nov 14;379.
3. Afrose A. *Evaluation of endometriosis risk factors, symptoms, and clinical treatments in Bangladesh: a cross-sectional study* (Doctoral dissertation, Brac University).
4. Saunders PT, Horne AW. Endometriosis: Etiology, pathobiology, and therapeutic prospects. Cell. 2021 May 27;184(11):2807-24.
5. Taylor HS, Kotlyar AM, Flores VA. Endometriosis is a chronic systemic disease: clinical challenges and novel innovations. The Lancet. 2021 Feb 27;397(10276):839-52.
6. Vercellini P, Viganò P, Somigliana E, Fedele L. Endometriosis: pathogenesis and treatment. Nature Reviews Endocrinology. 2014 May;10(5):261-75.
7. Banu LP, Tasnim S. Endometriosis-An Update. Journal of Bangladesh College of Physicians and Surgeons. 2013;31(3):144-9.
8. Becker CM, Bokor A, Heikinheimo O, Horne A, Jansen F, Kiesel L, King K, Kvaskoff M, Nap A, Petersen K, Saridogan E. ESHRE guideline: endometriosis. Human reproduction open. 2022 Jan 1;2022(2):hoac009.
9. Chapron C, Marcellin L, Borghese B, Santulli P. Rethinking mechanisms, diagnosis and management of endometriosis. Nature Reviews Endocrinology. 2019 Nov;15(11):666-82.
10. Agarwal SK, Chapron C, Giudice LC, Laufer MR, Leyland N, Missmer SA, Singh SS, Taylor HS. Clinical diagnosis of endometriosis: a call to action. American journal of obstetrics and gynecology. 2019 Apr 1;220(4):354-e1.
11. Begum MR, Ehsan M, Ehsan N, Rashid F. How to Protect Fertility Potential in Endometriosis. Journal of South Asian Federation of Obstetrics and Gynaecology. 2024 Mar;16(2):134-44.
12. Burney RO, Giudice LC. Pathogenesis and pathophysiology of endometriosis. Fertility and sterility. 2012 Sep 1;98(3):511-9.
13. Smolarz B, Szyłło K, Romanowicz H. Endometriosis: epidemiology, classification, pathogenesis, treatment and genetics (review of literature). International journal of molecular sciences. 2021 Sep 29;22(19):10554.
14. Muteshi CM, Ohuma EO, Child T, Becker CM. The effect of endometriosis on live birth rate and other reproductive outcomes in ART cycles: a cohort study. Human reproduction open. 2018;2018(4):hoy016.

15. Ferrero S, Anserini P, Remorgida V, Ragni N. Body mass index in endometriosis. European Journal of Obstetrics & Gynecology and Reproductive Biology. 2005 Jul 1;121(1):94-8.
16. Lee S, Lee SY, Lee W. Occupational characteristics and risk factors associated with endometriosis among Korean female workers. Plos one. 2023 Oct 5;18(10):e0292362.
17. Bravi F, Parazzini F, Cipriani S, Chiaffarino F, Ricci E, Chiantera V, Viganò P, La Vecchia C. Tobacco smoking and risk of endometriosis: a systematic review and meta-analysis. BMJ open. 2014 Dec 1;4(12):e006325.
18. Nouri K, Ott J, Krupitz B, Huber JC, Wenzl R. Family incidence of endometriosis in first-, second-, and third-degree relatives: case-control study. Reproductive Biology and Endocrinology. 2010 Jul 11;8(1):85.
19. Vercellini P, Trespidi L, De Giorgi O, Cortesi I, Parazzini F, Crosignani PG. Endometriosis and pelvic pain: relation to disease stage and localization. Fertility and sterility. 1996 Feb 1;65(2):299-304.
20. Capraş RD, Badea IC, Moldovan M, Gaia-Oltean AI, Badea AF, Telecan T. The Diagnostic Performance of Transvaginal Ultrasound for Posterior Compartment Endometriosis Compared to Laparoscopic and Histopathological Findings: A Systematic Review. InHealthcare 2025 Oct 10 (Vol. 13, No. 20, p. 2548). MDPI.
21. Othman ER, Al-Hendy A, Mostafa R, Lambalk CB, Mijatovic V. Oral GnRH antagonists in combination with estradiol and norethindrone acetate for pain relief associated with endometriosis: a review of evidence of a novel class of hormonal agents. International Journal of Women's Health. 2024 Dec 31:309-21.
22. Piriyev E, Schiermeier S, Römer T. Hormonal treatment of endometriosis: a narrative review. Pharmaceuticals. 2025 Apr 17;18(4):588.
23. Jensen JT, Schlaff W, Gordon K. Use of combined hormonal contraceptives for the treatment of endometriosis-related pain: a systematic review of the evidence. Fertility and sterility. 2018 Jul 1;110(1):137-52.
24. Samy A, Taher A, Sileem SA, Abdelhakim AM, Fathi M, Haggag H, Ashour K, Ahmed SA, Shareef MA, AlAmodi AA, Keshta NH. Medical therapy options for endometriosis related pain, which is better? A systematic review and network meta-analysis of randomized controlled trials. Journal of gynecology obstetrics and human reproduction. 2021 Jan 1;50(1):101798.
25. Becker CM, Gattrell WT, Gude K, Singh SS. Reevaluating response and failure of medical treatment of endometriosis: a systematic review. Fertility and sterility. 2017 Jul 1;108(1):125-36.
26. Grandi G, Xholli A, Napolitano A, Palma F, Cagnacci A. Pelvic pain and quality of life of women with endometriosis during quadriphasic estradiol valerate/dienogest oral contraceptive: a patient-preference prospective 24-week pilot study. Reproductive Sciences. 2015 May;22(5):626-32.
27. Richard E, Morin J, Murji A, Lemyre M, Laberge PY, Maheux-Lacroix S. Effect of postoperative hormonal suppression on fertility in patients with endometriosis after conservative surgery: a systematic review and meta-analysis. Obstetrics & Gynecology. 2022 Jun 1;139(6):1169-79.
28. Strowitzki T, Faustmann T, Gerlinger C, Schumacher U, Ahlers C, Seitz C. Safety and tolerability of dienogest in endometriosis: pooled analysis from the European clinical study program. International journal of women's health. 2015 Apr 15:393-401.