

CADTH Reference List

Low-Dose 5-Year Intrauterine Devices for Treatment of Endometriosis

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Key Messages

- No evidence was identified regarding the clinical effectiveness of low-dose 5-year intrauterine devices for treatment of endometriosis.
- No evidence-based guidelines were identified regarding low-dose 5-year intrauterine devices for treatment of endometriosis.

Research Questions

1. What is the clinical effectiveness of low-dose 5-year intrauterine devices for treatment of endometriosis?
2. What are the evidence-based guidelines regarding low-dose 5-year intrauterine devices for treatment of endometriosis?

Methods

Literature Search Methods

A limited literature search was conducted by an information specialist on key resources including MEDLINE, Embase, the Cochrane Database of Systematic Reviews, the international HTA database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concepts were low-dose intrauterine devices and endometriosis. No filters were applied to limit the retrieval by study type. An additional search for endometriosis was done, in which CADTH-developed search filters were applied to limit retrieval to guidelines. When possible, retrieval was limited to the human population. The search was also limited to English-language documents published between January 1, 2016, and May 10, 2021. Internet links were provided, when available.

Selection Criteria

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in Table 1. Full texts of study publications were not reviewed. Open-access, full-text versions of evidence-based guidelines were reviewed when abstracts were not available.

Results

No relevant health technology assessments, systematic reviews, randomized controlled trials, or non-randomized studies were identified regarding the clinical effectiveness of low-dose 5-year intrauterine devices for treatment of endometriosis. No evidence-based guidelines were identified regarding low-dose 5-year intrauterine devices for treatment of endometriosis.

Table 1: Selection Criteria

Criteria	Description
Population	Patients with endometriosis
Intervention	Low-dose 5-year intrauterine devices (e.g., Kyleena) alone or in combination with other treatment options
Comparator	High-dose intrauterine devices (e.g., Mirena) alone or in combination with other treatments; other contraceptives (e.g., oral contraceptive, patch); no hormonal therapy (e.g., surgery, lifestyle changes)
Outcomes	Q1: Clinical effectiveness (e.g., change in symptoms, quality of life, safety) Q2: Recommendations regarding the use of low-dose intrauterine devices for patients with endometriosis; recommendations regarding the choice of high-dose intrauterine devices versus low-dose intrauterine devices for patients with endometriosis
Study designs	Health technology assessments, systematic reviews, randomized controlled trials, non-randomized studies, evidence-based guidelines

References of potential interest that did not meet the inclusion criteria are provided in Appendix 1.

References

Health Technology Assessments

No literature identified.

Systematic Reviews and Meta-analyses

No literature identified.

Randomized Controlled Trials

No literature identified.

Non-Randomized Studies

No literature identified.

Guidelines and Recommendations

No literature identified.

Appendix 1: References of Potential Interest

Systematic Reviews and Meta-analyses

Unclear Intervention: Dosage Not Specified

1. Liu Y, Gong H, Gou J, et al. Dienogest as a Maintenance Treatment for Endometriosis Following Surgery: A Systematic Review and Meta-Analysis. *Front Med (Lausanne)*. 2021;8:652505. . [PubMed](#)
2. Samy A, Taher A, Sileem SA, et al. Medical therapy options for endometriosis related pain, which is better? A systematic review and network meta-analysis of randomized controlled trials. *J Gynecol Obstet Hum Reprod*. 2021 Jan;50(1):101798. [PubMed](#)
3. Wattanayingcharoenchai R, Rattanasiri S, Charakorn C, et al. Postoperative hormonal treatment for prevention of endometrioma recurrence after ovarian cystectomy: a systematic review and network meta-analysis. *BJOG*. 2021 Jan;128(1):25-35. [PubMed](#)
4. Zakhari A, Delpero E, McKeown S, et al. Endometriosis recurrence following post-operative hormonal suppression: a systematic review and meta-analysis. *Hum Reprod Update*. 2021 Jan 04;27(1):96-107. [PubMed](#)
5. Song SY, Park M, Lee GW, et al. Efficacy of levonorgestrel releasing intrauterine system as a postoperative maintenance therapy of endometriosis: A meta-analysis. *Eur J Obstet Gynecol Reprod Biol*. 2018 Dec;231:85-92. [PubMed](#)

Guidelines and Recommendations

Unclear Intervention: Dosage Not Specified

6. Kawaguchi R, Matsumoto K, Ishikawa T, et al. Guideline for Gynecological Practice in Japan: Japan Society of Obstetrics and Gynecology and Japan Association of Obstetricians and Gynecologists 2020 edition. *J Obstet Gynaecol Res*. 2021 Jan;47(1):5-25. [PubMed](#)
7. Hwang H, Chung YJ, Lee SR, et al. Clinical evaluation and management of endometriosis: guideline for Korean patients from Korean Society of Endometriosis. *Obstet Gynecol Sci*. 2018 Sep;61(5):553-564. [PubMed](#)
8. Sauvan M, Chabbert-Buffet N, Canis M, et al. Medical treatment for the management of painful endometriosis without infertility: CNGOF-HAS Endometriosis Guidelines. *Gynecol Obstet Fertil Senol*. 2018 Mar;46(3):267-272. [PubMed](#)

Review Articles

9. Adeyemi-Fowode OA, Bercaw-Pratt JL. Intrauterine devices: Effective Contraception with Noncontraceptive Benefits for Adolescents. *J Pediatr Adolesc Gynecol*. 2019 Sep;32(5S):S2-S6. [PubMed](#)
10. Grandi G, Farulla A, Sileo FG, Facchinetti F. Levonorgestrel-releasing intra-uterine systems as female contraceptives. *Expert Opin Pharmacother*. 2018 May;19(7):677-686. [PubMed](#)

Additional References

11. National Institute for Health and Care Excellence. Hormone therapy for endometriosis symptoms: patient decision aid. . *NICE Guideline [NG73]*. 2017; <https://www.nice.org.uk/guidance/ng73/resources/patient-decision-aid-hormone-treatment-for-endometriosis-symptoms-what-are-my-options-pdf-4595573197> Accessed 2021 May 15