UW Integrative Health

Department of Family Medicine and Community Health



Endometriosis: An Integrative Approach

Endometriosis is the presence of endometrial tissue outside of the uterus. The diagnosis of endometriosis is often made clinically based on history, with women reporting dysmenorrhea, pelvic pain, dyspareunia, and fertility issues. Endometriosis can sometimes be detected on transvaginal ultrasound. However, definitive diagnosis requires laparoscopy with biopsy.

Approximately 10% of women are affected by this condition. Risk factors include an affected first-degree relative, no previous use of oral contraceptive pills, history of Graves' disease, and history of inflammatory gynecologic disease^{1,2}

There are many theories regarding the pathogenesis of endometriosis. The most commonly accepted theory is that endometriosis is caused by retrograde reflux of menstrual tissue through the fallopian tubes into the pelvis. Endometriosis involves overproduction of local estrogen from increased aromatase activity, and pain results from the production of inflammatory prostaglandins and development of lesions near nerve fibers.³

Conventional treatment approaches depend on whether future fertility is desired. Options include anti-inflammatory approaches such as NSAIDs and medical suppressive therapies including hormonal contraceptives and gonadotropin-releasing hormone (GnRH) agonists. If painful symptoms persist, surgical intervention includes ablation or excision of the endometriomas or hysterectomy. The American College of Obstetricians and Gynecologists reviews these interventions in their guidelines for the management of endometriosis.³

Despite a lack of research on integrative approaches to treating endometriosis, they offer potential benefits with limited risks and should be considered.

1. Prevention

There is not much evidence for interventions to prevent the development of endometriosis. For women at increased risk due to an affected first-degree relative, consider increasing dairy intake and encouraging breastfeeding, if applicable. Women in the Nurses' Health Study who ate three or more servings of dairy per day were 18% less likely to be diagnosed with endometriosis.⁴. Evidence suggests that breastfeeding may be protective.⁵

2. Inflammation

Reduce inflammation with an anti-inflammatory diet. Consider anti-inflammatory botanicals such as ginger (*Zingiber officinale*) and turmeric (*Curcuma longa*), in addition to omega-3 fatty acid supplementation of 1,000-2,000 mg of EPA (*eicosapentaenoic acid*) and DHA (*docosahexaenoic acid*) daily if dietary intake is inadequate.

3. Estrogen Dominance

Consider lifestyle changes to decrease estrogen dominance in the body, because estrogen has been shown to support the growth of endometrial tissue. Approaches include a diet high in

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cruciferous vegetables, omega-3 supplementation, avoidance of xenoestrogens, and promotion of a healthy intestinal microbiome. For more information, see the "<u>Estrogen Dominance</u>" Integrative Health tool.

4. Botanicals

Note: Supplements are not regulated with the same degree of oversight as medications, and it is important that clinicians keep this in mind. Products vary greatly in terms of accuracy of labeling, presence of adulterants, and the legitimacy of claims made by the manufacturer.

Botanicals may help improve the symptoms of endometriosis, because they are often used in dysmenorrhea. Although only small studies support their use for endometriosis, many women may prefer a trial due to their low risk and rare side effects.

- **Chaste tree berry** (*Vitex agnus-castus*) is used to treat menstrual irregularities, including menometrorrhagia. The exact mechanism of action is unknown, but it has effects on multiple neurotransmitters and hormones, including a progesterogenic effect on the endometrial lining.⁶ The typical dose is 20-240 mg per day of crude herb. It is generally well tolerated; side effects include headache, gastrointestinal disturbance, acne, and rash.⁷
- **Ginger** (*Zingiber officinale*) and **turmeric** (*Curcuma longa*) may be beneficial due to their anti-inflammatory activity. Ginger is often used to decrease heavy menstrual flow. Ginger dose is typically 1-4 gm per day of dried powder or 100 mg per day of ginger root extract.⁸ Turmeric dose is typically 500 mg twice daily.^{9,10}

5. Muscle Tension and Chronic Pain

Chronic muscle tension may contribute to pain. Consider recommending regular movement, stretching, massage, osteopathic manipulation, and even targeted pelvic floor physical therapy. Use of heat, such as placing a castor oil pack over the pelvis for 20-30 minutes, may increase blood flow and improve pain.¹¹

6. Acupuncture and Acupressure

Using acupuncture and acupressure may help with the symptoms of dysmenorrhea experienced in endometriosis. Data is inconclusive because of the limitations of many research studies. Meta-analysis of higher-quality studies suggests that acupuncture and acupressure is effective for treatment of dysmenorrhea and improves pain compared to placebo in endometriosis.¹²⁻¹⁴

7. Other Healing Approaches

A systematic review of the research for mind-body therapies in the treatment of endometriosis found no conclusive evidence, although suggested that many interventions show promise in treating symptoms.¹⁵

Resource Links

• <u>Estrogen Dominance</u>: https://www.fammed.wisc.edu/files/webfmuploads/documents/outreach/im/tool-estrogen-dominance.pdf

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 <u>Passport to Whole Health</u>: https://www.va.gov/WHOLEHEALTHLIBRARY/docs/Passport_to_WholeHealth_FY2020 _508.pdf

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"Endometriosis" was adapted for the University of Wisconsin Integrative Health Program from the original written by Anne Kolan, MD (2014, updated 2020). Modified for UW Integrative Health in 2021.

This Integrative Health tool was made possible through a collaborative effort between the University of Wisconsin Integrative Health Program, VA Office of Patient Centered Care and Cultural Transformation, and Pacific Institute for Research and Evaluation.

References

- 1. Mounsey A, Smith M. Endometriosis. Updated March 11, 2020. Accessed April 28, 2020, https://www-essentialevidenceplus-com.ezproxy.library.wisc.edu/content/eee/236
- 2. Cole M. Endometriosis. In: Maizes V, Low Dog T, eds. *Integrative Women's Health*. Oxford University Press; 2010:283-301.
- 3. American College of Obstetricians and Gynecologists (ACOG). Management of endometriosis. Practice Bulletin No. 114. *Obstet Gynecol*. 2010;116:223-236.
- 4. Harris HR, Chavarro JE, Malspeis S, Willett WC, Missmer SA. Dairy-food, calcium, magnesium, and vitamin D intake and endometriosis: a prospective cohort study. *Am J Epidemiol*. 2013:kws247.
- Farland LV, Eliassen AH, Tamimi RM, Spiegelman D, Michels KB, Missmer SA. History of breast feeding and risk of incident endometriosis: prospective cohort study. *BMJ*. Aug 29 2017;358:j3778. doi:10.1136/bmj.j3778
- 6. Low Dog T, Micozzi M. Women's Health in Complementary and Integrative Medicine: A Clinical Guide. Elsevier Churchill Livingstone; 2005.
- 7. Natural Medicines Comprehensive Database. Vitex agnus-castus. Updated April 27, 2020. Accessed April 28, 2020, <u>https://naturalmedicines.therapeuticresearch.com/databases/food,-herbs-supplements/professional.aspx?productid=968</u>
- 8. Perron J. Uterine fibroids. In: Maizes V, Low Dog T, eds. *Integrative Women's Health*. Oxford University Press; 2010:319-334.
- Natural Medicines Comprehensive Database. Ginger. Updated March 3, 2020. Accessed April 28, 2020, <u>https://naturalmedicines.therapeuticresearch.com/databases/food,-herbs-</u> <u>supplements/professional.aspx?productid=961</u>
- 10. Natural Medicines Comprehensive Database. Tumeric. Updated April 15, 2020. Accessed April 28, 2020, <u>https://naturalmedicines.therapeuticresearch.com/databases/food,-herbs-supplements/professional.aspx?productid=662</u>
- 11. Warshowsky A. Uterine Fibroids. In: Rakel D, ed. *Integr Med*. 4th ed. Elsevier Saunders; 2018:578-591.
- Mira TAA, Buen MM, Borges MG, Yela DA, Benetti-Pinto CL. Systematic review and meta-analysis of complementary treatments for women with symptomatic endometriosis. *Int J Gynaecol Obstet*. Oct 2018;143(1):2-9. doi:10.1002/ijgo.12576
- Xu Y, Zhao W, Li T, Zhao Y, Bu H, Song S. Effects of acupuncture for the treatment of endometriosisrelated pain: A systematic review and meta-analysis. *PLoS One*. 2017;12(10):e0186616. doi:10.1371/journal.pone.0186616
- 14. Kuphal G. Dysmenorrhea. In: Rakel D, ed. Integr Med. 4th ed. Elsevier Saunders; 2018:569-577.
- Evans S, Fernandez S, Olive L, Payne LA, Mikocka-Walus A. Psychological and mind-body interventions for endometriosis: A systematic review. *J Psychosom Res.* Sep 2019;124:109756. doi:10.1016/j.jpsychores.2019.109756

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