

Endometriosis: Diagnosis and Management

This Clinical Practice Guideline has been reviewed by the Clinical Practice Gynaecology Committee and reviewed and approved by the Executive and Council of the Society of Obstetricians and Gynaecologists of Canada.

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Abstract

Objective: To improve the understanding of endometriosis and to provide evidence-based guidelines for the diagnosis and management of endometriosis.

Outcomes: Outcomes evaluated include the impact of the medical and surgical management of endometriosis on women's experience of morbidity and infertility.

Methods: Members of the guideline committee were selected on the basis of individual expertise to represent a range of practical and academic experience in terms of both location in Canada and type of practice, as well as subspecialty expertise along with general gynaecology background. The committee reviewed all available evidence in the English and French medical literature and available data from a survey of Canadian women. Recommendations were established as consensus statements. The final document was reviewed and approved by the Executive and Council of the SOGC.

Results: This document provides a summary of up-to-date evidence regarding diagnosis, investigations, and medical and surgical management of endometriosis. The resulting recommendations may be adapted by individual health care workers when serving women with this condition.

Conclusions: Endometriosis is a common and sometimes debilitating condition for women of reproductive age. A multidisciplinary approach involving a combination of lifestyle modifications, medications, and allied health services should be used to limit the impact of this condition on activities of daily living and fertility. In some circumstances surgery is required to confirm the diagnosis and provide therapy to achieve the desired goal of pain relief or improved fecundity. Women who find an acceptable management strategy for this condition may have an improved quality of life or attain their goal of successful pregnancy.

Evidence: Medline and Cochrane databases were searched for articles in English and French on subjects related to endometriosis, pelvic pain, and infertility from January 1999 to October 2009 in order to prepare a Canadian consensus guideline on the management of endometriosis.

Values: The quality of evidence was rated with use of the criteria described by the Canadian Task Force on Preventive Health Care. Recommendations for practice were ranked according to the method described by the Task Force. See Table 1.

Benefits, harms, and costs: Implementation of the guideline recommendations will improve the care of women with pain and infertility associated with endometriosis.

Key Words: Endometriosis, endometrioma, pelvic pain, infertility, laparoscopy

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Table 1. Key to evidence statements and grading of recommendations, using the ranking of the Canadian Task Force on Preventive Health Care*

| Quality of evidence assessment† | Classification of recommendations‡ |
|---|--|
| I: Evidence obtained from at least one properly randomized controlled trial | A. There is good evidence to recommend the clinical preventive action |
| II-1: Evidence from well-designed controlled trials without randomization | B. There is fair evidence to recommend the clinical preventive action |
| II-2: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one centre or research group | C. The existing evidence is conflicting and does not allow to make a recommendation for or against use of the clinical preventive action; however, other factors may influence decision-making |
| II-3: Evidence obtained from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category | D. There is fair evidence to recommend against the clinical preventive action |
| III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees | E. There is good evidence to recommend against the clinical preventive action |
| | L. There is insufficient evidence (in quantity or quality) to make a recommendation; however, other factors may influence decision-making |

*Woolf SH, Battista RN, Angerson GM, Logan AG, Eel W. Canadian Task Force on Preventive Health Care. New grades for recommendations from the Canadian Task Force on Preventive Health Care. *Can Med Assoc J* 2003;169(3):207-8.

†The quality of evidence reported in these guidelines has been adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on Preventive Health Care.*

‡Recommendations included in these guidelines have been adapted from the Classification of Recommendations criteria described in the Canadian Task Force on Preventive Health Care.*

Summary Statements and Recommendations

Chapter 1: Introduction

Summary Statements

1. Endometriosis is common, affecting 5% to 10% of the female population, and the significance of the disease depends on the clinical presentation. (II-3)
2. The cellular and molecular etiologic theories of endometriosis as an inflammatory and estrogen-dependent disorder have improved our understanding. (III)

Chapter 2: Pain Management

Summary Statements

1. Symptoms may vary; however, certain hallmark symptoms may be more likely to suggest endometriosis. The clinician should be aware of atypical presentations. (I)
2. Endometriosis can be a chronic, relapsing disorder, which may necessitate a long-term follow-up. (I)
3. When deeply infiltrating endometriosis is suspected, a pelvic examination, including rectovaginal examination, is essential. (III)

Recommendations

1. Investigation of suspected endometriosis should include history, physical, and imaging assessments. (III-A)
2. Routine CA-125 testing as part of the diagnostic investigation of endometriosis should not be performed. (II-2D)

Chapter 3: Medical Management of Pain Associated With Endometriosis

Recommendations

1. Combined hormonal contraceptives, ideally administered continuously, should be considered as first-line agents. (I-A)

2. Administration of progestin alone—orally, intramuscularly, or subcutaneously—may also be considered as first-line therapy. (I-A)
3. A GnRH agonist with HT addback, or the LNG-IUS, should be considered a second-line therapeutic option. (I-A)
4. A GnRH agonist should be combined with HT addback therapy from commencement of therapy and may be considered for longer-term use (> 6 months). (I-A)
5. While awaiting resolution of symptoms from the directed medical or surgical treatments for endometriosis, practitioners should use clinical judgement in prescribing analgesics ranging from NSAIDs to opioids. (III-A)

Chapter 4: Surgical Management of Endometriosis

Summary Statements

1. Treatment of endometriosis by excision or ablation reduces pain. (I)
2. For women with endometriomas, excision rather than drainage or fulguration provides better pain relief, a reduced recurrence rate, and a histopathological diagnosis. (I)
3. Laparoscopic uterine nerve ablation alone does not offer significant relief of endometriosis-related pain. (I)

Recommendations

1. An asymptomatic patient with an incidental finding of endometriosis at the time of surgery does not require any medical or surgical intervention. (III-A)
2. Surgical management in women with endometriosis-related pain should be reserved for those in whom medical treatment has failed. (III-A)
3. Surgical treatment of deeply infiltrating endometriosis may require particular experience with a multidisciplinary approach. (III-A)

- Ovarian endometriomas greater than 3 cm in diameter in women with pelvic pain should be excised if possible. (I-A)
- In patients not seeking pregnancy, therapy with CHCs (cyclic or continuous) should be considered after surgical management of ovarian endometriomas. (I-A)
- Presacral neurectomy may be considered as an adjunct to the surgical treatment of endometriosis-related pelvic pain. (I-A)

Chapter 5: Surgical Management of Infertility Associated With Endometriosis

Summary Statements

- Laparoscopic treatment of minimal or mild endometriosis improves pregnancy rates regardless of the treatment modality. (I)
- The effect on fertility of surgical treatment of deeply infiltrating endometriosis is controversial. (II)
- Laparoscopic excision of ovarian endometriomas more than 3 cm in diameter may improve fertility. (II)

Chapter 6: Medical Treatment of Infertility Related to Endometriosis

Summary Statement

- If a patient with known endometriosis is to undergo IVF, GnRH agonist suppression with HT addback for 3 to 6 months before IVF is associated with an improved pregnancy rate. (I)

Recommendation

- Medical management of infertility related to endometriosis in the form of hormonal suppression is ineffective and should not be offered. (I-E)

Chapter 7: Endometriosis in Adolescents

Summary Statements

- Endometriosis is the most common cause of secondary dysmenorrhea in adolescents. (II-2)
- Adolescents with endometriosis are more likely than adult women to present with acyclic pain. (III)
- The physical examination of adolescents with endometriosis will rarely reveal abnormalities, as most will have early-stage disease. (II-2)

Recommendations

- Endometriosis in adolescents is often early stage and atypical. Laparoscopists should look intra-abdominally for clear vesicles and red lesions in adolescents. (II-2B)
- All available therapies for endometriosis may be used in adolescents, but the age of the patient and the side-effect profiles of the medications should be considered. (III-A)

Chapter 8: Endometriosis and Cancer

Summary Statements

- The prevalence of ovarian cancer in patients with endometriosis is under 1%. (II-2)
- Excision or sampling of suspected endometriosis lesions and endometriomas helps confirm the diagnosis and exclude underlying malignancy. (II-2)

Recommendations

- Biopsy of endometriosis lesions should be considered to confirm the diagnosis and to rule out underlying malignancy. (II-2A)
- Suspected ovarian endometriomas should be treated according to the SOGC guideline "Initial Evaluation and Referral Guidelines for Management of Pelvic/Ovarian Masses." (III-A)

ABBREVIATIONS

| | |
|---------|---|
| ASRM | American Society of Reproductive Medicine |
| BMD | bone mineral density |
| CHCs | combined hormonal contraceptives |
| DMPA | depot medroxyprogesterone acetate |
| GnRH | gonadotropin releasing hormone |
| HT | hormone therapy |
| IVF | in vitro fertilization |
| LNG-IUS | levonorgestrel intrauterine system |
| MRI | magnetic resonance imaging |
| NSAIDs | nonsteroidal anti-inflammatory drugs |
| RCT | randomized controlled trial |