No. 345-Primary Dysmenorrhea Consensus Guideline

This Clinical Practice Guideline has been prepared and reviewed by the Society of Obstetricians and Gynaecologists of Canada Clinical Practice-Gynaecology and CANPAGO Committees and approved by the Board of the SOGC.

PRINCIPAL AUTHORS
Margaret Burnett, MD, Winnipeg, MB
Madeleine Lemyre, MD, Québec, QC

CLINICAL PRACTICE GYNAECOLOGY COMMITTEE
Alaa Awadalla, MD, Winnipeg, MB
Annette Bullen, RN, Caledonia, ON
Margaret Burnett, MD, Winnipeg, MB
Susan Goldstein, MD, Toronto, ON
Madeleine Lemyre, MD, Quebec, QC
Nicholas Leyland, MD, Hamilton, ON (co-chair)

Frank Potestio, MD, Thunder Bay, ON
David Rittenberg, MD, Halifax, NS
Jackie Thurston, MD, Calgary, AB
Wendy Wolfman, MD, Toronto, ON (co-chair)
Grace Yeung, MD, Toronto, ON

CANPAGO COMMITTEE
Lisa Allen, MD, Toronto, ON
Philippa Brain, MD, Calgary, AB
Elise Dubuc, MD, Montreal, QC
Debra Millar, MD, Vancouver, BC
Deanna Murphy, MD, St. John’s, NL
Rachel Spitzer, MD, Toronto, ON

Disclosure statements have been received from all members of the committees.

Abstract

Objective: This guideline reviews the investigation and treatment of primary dysmenorrhea.

Intended Users: Health care providers.

Target Population: Women and adolescents experiencing menstrual pain for which no underlying cause has been identified.

Evidence: Published clinical trials, population studies, and review articles cited in PubMed or the Cochrane database from January 2005 to March 2016.

Validation Methods: Seven clinical questions were generated by the authors and reviewed by the SOGC Clinical Practice-Gynaecology Committee. The available literature was searched. Guideline No. 169 was reviewed and rewritten in order to incorporate current evidence. Recommendations addressing the identified clinical questions were formulated and evaluated using the ranking of the Canadian Task Force on Preventive Health Care.

Key Words: Primary dysmenorrhea, secondary dysmenorrhea, pelvic pain, menstrual pain, endometriosis, menorrhagia, management of dysmenorrhea

Corresponding Author: Dr. Margaret Burnett, Clinical Practice Gynaecology Committee, MBurnett@exchange.hsc.mb.ca

https://doi.org/10.1016/j.jogc.2016.12.023

This document reflects emerging clinical and scientific advances on the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed. Local institutions can dictate amendments to these opinions. They should be well documented if modified at the local level. None of these contents may be reproduced in any form without prior written permission of the publisher.

Women have the right and responsibility to make informed decisions about their care in partnership with their health care providers. In order to facilitate informed choice, women should be provided with information and support that is evidence-based, culturally appropriate, and tailored to their needs. The values, beliefs, and individual needs of each woman and her family should be sought, and the final decision about the care and treatment options chosen by the woman should be respected.
**Benefits, Harms, and Costs:** Primary dysmenorrhea is common and frequently undertreated. Effective therapy is widely available at minimal cost. Treatment has the potential to improve quality of life and to decrease time lost from school or work.

**Guideline Update:** This guideline is a revision and update of No. 169, December 2005.

**Sponsors:** SOGC.

**Summary Statements**

1. Dysmenorrhea is highly prevalent and commonly undertreated (III).
2. Non-steroidal anti-inflammatory drugs are more effective than placebo but have more gastrointestinal side effects. All currently available non-steroidal anti-inflammatory drugs are of comparable efficacy and safety (I).
3. Suppression of ovulation is associated with decreased menstrual pain (II-1).
4. Amenorrhea induced by any means is beneficial for the treatment of dysmenorrhea (II-2).
5. Hysterectomy is effective treatment (II-2).
6. There is some evidence to support laparoscopic nerve ablation in selected cases (II-1).

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

<table>
<thead>
<tr>
<th>Quality of evidence assessment</th>
<th>Classification of recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>I: Evidence obtained from at least one properly randomized controlled trial.</td>
<td>A. There is good evidence to recommend the clinical preventive action.</td>
</tr>
<tr>
<td>II-1: Evidence from well-designed controlled trials without randomization.</td>
<td>B. There is fair evidence to recommend the clinical preventive action.</td>
</tr>
<tr>
<td>II-2: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one centre or research group.</td>
<td>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.</td>
</tr>
<tr>
<td>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 the category.</td>
<td>D. There is fair evidence to recommend against the clinical preventive action.</td>
</tr>
<tr>
<td>III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees.</td>
<td>E. There is good evidence to recommend against the clinical preventive action.</td>
</tr>
<tr>
<td></td>
<td>F. There is insufficient evidence (in quantity or quality) to make a recommendation; however, other factors may influence decision-making.</td>
</tr>
</tbody>
</table>

†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.

**Abbreviations**

- **CANPAGO**: Canadian Pediatric and Adolescent Gynecology and Obstetrics Committee
- **CHC**: combined hormonal contraceptive
- **COC**: combined oral contraceptive
- **hTENS**: high-frequency transcutaneous electrical nerve stimulation
- **LN-IUS**: levonorgestrel intrauterine system
- **LUNA**: laparoscopic uterosacral nerve ablation
- **NSAID**: non-steroidal anti-inflammatory drug
- **PSN**: pre-sacral neurectomy
- **TENS**: transcutaneous electrical nerve stimulation

7. Endometrial ablation is likely to reduce symptoms of dysmenorrhea when it occurs in the presence of menorrhagia (I).

**Recommendations**

1. Both primary and secondary dysmenorrhea are likely to respond to the same medical therapy. Therefore, initiation of treatment should not depend on establishing a precise diagnosis (II-1A).
2. Health care providers should include specific questions regarding menstrual pain when obtaining a woman’s medical history (III-B).
3. A pelvic examination is not necessary prior to initiating therapy (III-D).
4. A pelvic examination is indicated in patients not responding to conventional therapy and when organic pathology is suspected (III-B).
5. Non-steroidal anti-inflammatory drugs, administered with regular dosing regimens, should be considered first-line treatment for most women (I-A).
6. Hormonal therapies should be offered to women and girls who are not currently planning pregnancy unless contraindications exist (I-A).
7. Continuous or extended use combined hormonal contraceptives are recommended (I-A).
8. Regular exercise is likely to improve symptoms of dysmenorrhea and should be recommended (II-1A).
9. Local heat in the form of heated pads or patches should be recommended as a complementary treatment for dysmenorrhea (I-A).
10. High-frequency transcutaneous electrical nerve stimulation should be considered as a complementary treatment or in women unable or unwilling to use conventional therapy (II-1B).
11. Acupuncture stimulation should be considered for women wishing to use complementary or alternative therapies (II-1B).
12. Ginger is recommended for women wishing to use complementary or alternative therapies (I-A).
13. Preoperative investigations should include a detailed history and physical examination, ultrasound, and possibly magnetic resonance imaging to discover secondary causes for dysmenorrhea and to direct appropriate therapy (II-A).
14. Surgical intervention should only be considered if a concerted trial of medical therapy has not been successful (III-A).