

Abnormal Uterine Bleeding in Pre-Menopausal Women

This clinical practice guideline has been prepared by the Clinical Practice – Gynaecology Committee, reviewed by the Canadian Paediatric and Adolescent Gynaecology/Obstetrics Committee, and approved by the Executive and Council of the Society of Obstetricians and Gynaecologists of Canada.

PRINCIPAL AUTHORS

Sukhbir Singh, MD, Ottawa ON

Carolyn Best, MD, Toronto ON

Sheila Dunn, MD, Toronto ON

Nicholas Leyland, MD, Toronto ON

Wendy Lynn Wolfman, MD, Toronto ON

CLINICAL PRACTICE – GYNAECOLOGY COMMITTEE

Nicholas Leyland, MD, (Co-chair), North York ON

Wendy Wolfman, MD, (Co-chair), Toronto ON

Catherine Allaire, MD, Vancouver BC

Alaa Awadalla, MD, Winnipeg MB

Carolyn Best, MD, Toronto ON

Sheila Dunn, MD, Toronto ON

Mark Heywood, MD, Vancouver BC

Madeleine Lemyre, MD, Quebec QC

Violaine Marcoux, MD, Ville Mont-Royal QC

Chantal Menard, RN, Ottawa ON

Frank Potestio, MD, Thunder Bay ON

David Rittenberg, MD, Halifax NS

Sukhbir Singh, MD, Ottawa ON

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

Abstract

Background: Abnormal uterine bleeding is the direct cause of a significant health care burden for women, their families, and society as a whole. Up to 30% of women will seek medical assistance for this problem during their reproductive years. This guideline replaces previous clinical guidelines on the topic and is aimed to enable health care providers with the tools to provide the latest evidence-based care in the diagnosis and the medical and surgical management of this common problem.

Objective: To provide current evidence-based guidelines for the diagnosis and management of abnormal uterine bleeding (AUB) among women of reproductive age.

Outcomes: Outcomes evaluated include the impact of AUB on quality of life and the results of interventions including medical and surgical management of AUB.

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 location in Canada, type of practice, subspecialty expertise, and general gynaecology background. The committee reviewed relevant evidence in the English medical literature including published guidelines. 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 AUB. The resulting recommendations may be adapted by individual health care workers when serving women with this condition.

Conclusions: Abnormal uterine bleeding is a common and sometimes debilitating condition in women of reproductive age. Standardization of related terminology, a systematic approach to diagnosis and investigation, and a step-wise approach to intervention is necessary. Treatment commencing with medical therapeutic modalities followed by the least invasive surgical modalities achieving results satisfactory to the patient is the ultimate goal of all therapeutic interventions.

Key Words: Menorrhagia, heavy menstrual bleeding, abnormal uterine bleeding, hysterectomy, endometrial ablation

J Obstet Gynaecol Can 2013;35(5 eSuppl):S1–S28

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 SOGC.

Evidence: Published literature was retrieved through searches of MEDLINE and the Cochrane Library in March 2011 using appropriate controlled vocabulary (e.g. uterine hemorrhage, menorrhagia) and key words (e.g. menorrhagia, heavy menstrual bleeding, abnormal uterine bleeding). Results were restricted to systematic reviews, randomized control trials/controlled clinical trials, and observational studies written in English and published from January 1999 to March 2011. Searches were updated on a regular basis and incorporated in the guideline to February 2013.

Grey (unpublished) literature was identified through searching the websites of health technology assessment and health technology-related agencies, clinical practice guideline collections, clinical trial registries, and national and international medical specialty societies.

Values: The quality of evidence in this document was rated using the criteria described in the Report of the Canadian Task Force on Preventive Health Care (Table 1).

Benefits, harms, and costs: Implementation of the guideline recommendations will improve the health and well-being of women with abnormal uterine bleeding, their families, and society. The economic cost of implementing these guidelines in the Canadian health care system was not considered.

Summary Statements

1. Abnormal uterine bleeding is a common condition affecting women of reproductive age that has significant social and economic impact. (II-2)
2. Contemporary terminology used to describe abnormal uterine bleeding in reproductive-aged women aims to simplify definitions and to provide standard descriptions related to patient presentation. (III)
3. The consequences of abnormal uterine bleeding on an individual's overall health determine the degree to which intervention may be required. (II-2)
4. A thorough history and physical exam will often indicate the cause of abnormal uterine bleeding and direct the need for further investigation and treatment (III).
5. Imaging and hysteroscopy offer the clinician additional information to assist in patient assessment and treatment in indicated circumstances. (I)
6. Once malignancy and significant pelvic pathology have been ruled out, medical treatment is an effective first-line therapeutic option for abnormal uterine bleeding. (I)
7. Medical treatment tailored to the individual woman's therapeutic goals, desire for contraception, underlying medical conditions, and tolerance of side effects will encourage compliance and maximize the likelihood of treatment success. (III)
8. Non-hysteroscopic ablation techniques offer similar patient satisfaction results with fewer risks of complications and less anaesthetic requirement than traditional hysteroscopic ablation. (I-A)
9. Hysterectomy provides definitive treatment for abnormal uterine bleeding.
10. Abnormal uterine bleeding secondary to submucosal fibroids may be managed by hysteroscopic myomectomy.
11. Inherited bleeding disorders may be an underlying cause of abnormal uterine bleeding, with von Willebrand's disease present in the majority of cases. (II-2)
12. Acute heavy menstrual bleeding may result in significant anemia and emergent care. (III)
13. Abnormal uterine bleeding in the adolescent most commonly represents ovulatory dysfunction related to immaturity of the hypothalamic-pituitary-ovarian axis. (II-2)

Recommendations

1. Adoption of standardized international terminology for abnormal uterine bleeding should be considered (III-C)
2. A complete blood count is recommended for women with heavy or prolonged bleeding. (II-2A)
3. If there is any possibility of pregnancy, a sensitive urine or serum pregnancy test should be performed. (III-C)
4. Testing for coagulation disorders should be considered only in women who have a history of heavy menstrual bleeding beginning at menarche or who have a personal or family history of abnormal bleeding. (II-2B)
5. Thyroid function tests are not indicated unless there are clinical findings suggestive of and index of possible suspicions of thyroid disease. (II-2D)
6. If imaging is indicated, transvaginal ultrasound should be the first line imaging modality for abnormal uterine bleeding. (I-A)
7. Saline infusion sonohysterography and diagnostic hysteroscopy should be used in the diagnosis and characterization of discrete intrauterine abnormalities such as submucosal fibroids. (I-A)
8. Endometrial biopsy should be considered in bleeding women over age 40 or in those with bleeding not responsive to medical therapy, as well as in younger women with risk factors from endometrial cancer. (II-2A)
9. Office endometrial biopsy should replace dilation and uterine curettage as the initial assessment of the endometrium for these women. (II-2A)
10. Focal lesions of the endometrium that require biopsy should be managed through hysteroscopy-guided evaluation. (II-2A)
11. Non-hormonal options such as non-steroidal anti-inflammatory drugs and antifibrinolytics can be used effectively to treat heavy menstrual bleeding that is mainly cyclic or predictable in timing. (I-A)
12. Combined oral contraceptive pills, depot medroxyprogesterone acetate, and levonorgestrel-releasing intrauterine systems significantly reduce menstrual bleeding and should be used to treat women with abnormal uterine bleeding who desire effective contraception. (I-A)
13. Cyclic luteal-phase progestins do not effectively reduce blood loss and therefore should not be used as a specific treatment for heavy menstrual bleeding. (I-E)
14. Danazol and gonadotropin-releasing hormone agonists will effectively reduce menstrual bleeding, and may be used for scenarios in which other medical or surgical treatments have failed or are contraindicated. (I-C)
15. Patients receiving a gonadotropin-releasing hormone agonist for longer than 6 months should be prescribed add-back hormone therapy, if not already initiated with gonadotropin-releasing hormone agonist commencement. (I-A)
16. The progestin intrauterine system has outcomes similar to endometrial ablation for women with heavy menstrual bleeding and thus may be considered prior to surgical intervention. (I-A)
17. In appropriate candidates, non-hysteroscopic ablation techniques should be the ablation methods of choice in view of their higher efficacy and safety than hysteroscopic techniques. (I-A)
18. With the exception of non-steroidal anti-inflammatory drugs, the same medical agents used to treat heavy menstrual bleeding among women with normal coagulation can effectively be used in the setting of inherited bleeding disorders. (II-1B)
19. Women with inherited bleeding disorders who have significant heavy menstrual bleeding or those who fail conventional

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

*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.

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. CMAJ 2003;169:207-8.

- medical therapy are best managed with a multidisciplinary approach. (III-C)
20. Hysterectomy planning or blood product therapy should be performed in consultation with a hematologist in patients with inherited bleeding disorders. (III-C)
21. Acute heavy menstrual bleeding should be managed promptly and systematically to minimize patient morbidity and the need for blood transfusion. (III-C)
22. High-dose estrogen and tranexamic acid may help decrease or arrest acute heavy menstrual bleeding. (III-C)
23. For the adolescent presenting with heavy menstrual bleeding at or in close approximation to menarche, history and investigations should include an assessment for an underlying bleeding disorder. (II-2A)

**This document's Abstract was
previously published in:
J Obstet Gynaecol Can 2013;35(5):473-475**