

Editorials

Treatment of heavy menstrual bleeding

BMJ 2010; 341 doi: <https://doi.org/10.1136/bmj.c3771> (Published 17 August 2010) Cite this as: BMJ 2010;341:c3771

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Patients prefer hysterectomy, but less radical treatment should be considered initially

Heavy menstrual bleeding (menorrhagia) is defined as blood loss greater than or equal to 80 ml per menstrual cycle.¹ About 5% of women in the United Kingdom aged 30-49 years seek advice about heavy menstrual bleeding. A systematic review of four studies suggested a prevalence of excessive menstrual bleeding of between 4% and 9%.²

In the linked systematic review (doi:[10.1136/bmj.c3929](https://doi.org/10.1136/bmj.c3929)), Middleton and colleagues assess the relative effectiveness of hysterectomy, endometrial destruction, and the levonorgestrel releasing intrauterine system (Mirena) system for the treatment of heavy menstrual bleeding.³

First line treatment is generally medical and includes (in order of preference) the levonorgestrel intrauterine system, antifibrinolytic drugs (such as tranexamic acid), non-steroidal anti-inflammatory drugs (such as mefenamic acid and naproxen), progestogens (such as norethisterone and medroxyprogesterone acetate), the combined oral contraceptive pill, and danazol.⁴ Except in the case of short course progestogens, these medical treatments are effective in reducing menstrual blood loss.⁴

Surgery may be indicated in women who have completed their family and those in whom medical treatment is futile or intolerable. Hysterectomy (abdominal, vaginal, or laparoscopic) is the definitive surgical treatment.⁴ In first or second generation endometrial resection or ablation, the endometrium and underlying basal glands are destroyed. First generation hysteroscopic techniques use an array of electrosurgical or laser tools. Second generation non-hysteroscopic techniques use the controlled application of heat, cold, microwave, or other forms of energy to destroy the endometrium.

Hysterectomy is the only truly effective way to eradicate heavy menstrual bleeding, other treatments manage symptoms alone. However, despite the 100% success rate associated with hysterectomy, it is a major surgical procedure with associated complications, and it has social and economic costs. The rate of serious postoperative complications is about 10%, and long convalescence periods are required.⁵ Endometrial destruction techniques have a shorter operation time and hospital stay, quicker recovery, fewer postoperative complications, and comparable rates of satisfaction (70-80%).⁶ Women favoured hysterectomy for the outcomes of bleeding and satisfaction (odds ratio 0.04, 95% confidence interval 0.01 to 0.22 at two years; 0.5, 0.3 to 0.8 at two years, respectively). Over time, and even though retreatment may be necessary after

endometrial destruction (0.5, 0.3 to 0.8 at two years), some women prefer this less invasive surgical treatment.⁶ Retreatment also reduces any economic benefit of conservative surgery over hysterectomy.⁷

Middleton and colleagues found that significantly more women were dissatisfied with the outcome of first generation hysteroscopic techniques than with the outcome of hysterectomy (2.46, 1.54 to 3.93) about one year after surgery. However, hospital stay and time to resumption of normal activities were significantly longer for hysterectomy. Unsatisfactory outcomes were similar with first and second generation techniques, although second generation techniques were quicker and women recovered sooner with fewer procedural complications. Insufficient data were available on the effectiveness of Mirena compared with invasive techniques for any conclusions to be drawn. The review's findings are in line with other systematic reviews,^{6 8} in spite of the unavailability of at least 35% of the data sought by the review's authors. As with previous systematic reviews, the inconsistent use of outcome measures in the included studies limits the applicability of the findings.

In terms of clinical practice, the review by Middleton and colleagues supports maintenance of the status quo. Heavy menstrual bleeding is subjective, so the conclusions cannot necessarily be generalised to all women. Quality of life was not significantly better after hysterectomy than with the intrauterine systems, and hysterectomy has serious complications and may not be cost effective. Objective assessment of menstrual fluid loss is essential to determine which women are most likely to benefit from the most radical treatment—hysterectomy. Suggestions include the use of visual analogue scores and pictorial blood loss assessment charts. Most women would be well advised to try a less radical treatment as first line treatment.⁶ Research into heavy menstrual bleeding is subjective; the diagnosis is often based on self report, with or without the use of a definitive scoring system for bleeding, and the use of diagnostic criteria is inconsistent.

Comparing surgical versus medical treatments is complex because treatment options (especially medical) are diverse. Further research is needed to compare the more contemporary types of hysterectomy (supracervical, vaginal, and laparoscopically assisted vaginal) with endometrial ablation techniques; and to compare second generation ablation methods with hysterectomy. Trials with at least four years of follow-up are needed for adequate economic comparisons to be made.⁶

Notes

Cite this as: *BMJ* 2010;341:c3771

Footnotes

- Research, doi:10.1136/bmj.c3929

- Competing interests: The author has completed the Unified Competing Interest form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declares: (1) No financial support for the submitted work from anyone other than their employer; (2) No financial relationships with commercial entities that might have an interest in the submitted work; (3) No spouse, partner, or children with relationships with commercial entities that might have an interest in the submitted work; (4) No non-financial interests that may be relevant to the submitted work.
- Provenance and peer review: Commissioned; not externally peer reviewed.

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