Management of Heavy Menstrual Bleeding
Evidence Brief

This policy for Management of Heavy Menstrual Bleeding (HMB) replaces policies T14 (Dilatation and Curettage and Hysteroscopy for HMB) and T15 (Hysterectomy for HMB). It was felt that the content of the two existing policies could be better communicated in a single document, especially as the treatments in question are part of the same management pathway. This is in keeping with policies from other Clinical Commissioning Groups (CCGs), for example West Essex CCG and Cambridge and Peterborough CCG.

There is limited evidence for the effectiveness of Dilatation and Curettage (D&C) in HMB. In their 2012 systematic review on the management of menorrhagia, Duckitt and Collins¹ found no systemic reviews or RCTs to support the therapeutic use of D&C in HMB. The authors comment that one cohort study suggested that there was a role for D&C as a diagnostic tool, however the study cited² is from 1977 and is almost certainly outdated. Oehler et al³ comment that whilst D&C used to be the gold standard for obtaining endometrial samples, it has been largely superseded by other techniques like hysteroscopy or aspiration curettage.

The NICE guidelines on HMB recommend D&C should not be used as a therapeutic treatment, and should not be used as a diagnostic tool alone. Their evidence review also failed to identify any systematic reviews or RCTs to support the therapeutic use of D&C in HMB. In their 2013 survey on the delivery of HMB services in England and Wales, Cox et al⁵ found that 87% of the 221 hospitals offered hysteroscopy and 98% offered endometrial biopsy. Given the availability of other effective diagnostic tools and the scarcity of evidence supporting its use, D&C for HMB will not be funded.

In this policy, hysteroscopy will only be funded if further diagnostic information is required following ultrasound, or as part of ablative procedures. This reflects the NICE⁴ recommendation that ultrasound be the first line investigation for HMB. Hysteroscopy is indicated in patients where a polyp or submucosal fibroid is suspected, where endometrial biopsy is required to rule out malignancy, or where ultrasound findings were inconclusive. NICE also recommend hysteroscopy immediately prior to non hysteroscopic ablation techniques in order to ensure correct placement of equipment.

Surgical management of HMB should be reserved for cases where pharmaceutical management is either contraindicated or has failed to relieve symptoms⁶. Local availability and individual clinician preference will affect which ablation techniques are offered, and it is beyond the scope of this policy to make recommendations on each treatment option in this category. During this evidence brief ablation techniques will be referred to in a general sense.

The levonorgestrel intrauterine system (LNG-IUS) should be considered the first line treatment for HMB, in keeping with guidance from NICE⁴ and the Royal College of Obstetricians and
Gynaecologists\textsuperscript{7}. The LNG-IUS has been found to reduce menstrual blood loss by 90\% in patients with HMB\textsuperscript{8,9}. The LNG-IUS has been shown to be equally effective in improving quality of life and psychological well being as hysterectomy\textsuperscript{10-11} and NICE developed a decision-analytic model\textsuperscript{12} in which the LNG-IUS was found to generate more QALYs at a lower cost than other medical or surgical management, making it (in theory) the most cost effective treatment. This is supported by research by Hurskainen \textit{et al}\textsuperscript{13} who found the LNG-IUS to be substantially more cost effective than hysterectomy. When compared with standard medical management (defined as tranexamic acid, mefenamic acid, COCP or oral progesterone) the LNG-IUS was found to be superior in reducing the effect of HMB on quality of life\textsuperscript{14}.

The evidence compiled by NICE suggests that it may take at least 6 months before the full effect of treatment with the LNG-IUS may be seen. This is because it is very common to experience irregular bleeding for the first 6 months or so after insertion of the LNG-IUS\textsuperscript{15}. Patients should be made aware of this when going through their treatment options.

The LNG-IUS is contraindicated in some patients and may be considered unacceptable to others, whilst for some patients their symptoms may not be adequately relieved by the LNG-IUS. Such patients can be managed with either tranexamic acid, or an NSAID, or the combined oral contraceptive pill (COCP), or injected/oral progestogen, and each medicine should be trialled for three menstrual cycles as per guidance from NICE. According to the NICE guidelines\textsuperscript{4}, in the event of the first pharmaceutical treatment failing, a second pharmaceutical treatment can be tried before referring straight to surgery.

In their systematic review from 2012 Naoulou and Tsai\textsuperscript{16} found tranexamic acid to be a safe and effective treatment for patients with idiopathic menorrhagia, although they highlight a need for further research on the use of tranexamic acid in patients with symptomatic fibroids. A systematic review\textsuperscript{17} from 2013 found NSAIDs reduced HMB more than placebo, but not as much as tranexamic acid or LNG-IUS. However, tranexamic acid has been reported to carry an increased risk of venous thromboembolism (VTE) so may not be suitable for all patients\textsuperscript{18}.

NHS Choices\textsuperscript{19} provides patient information on the treatment options for HMB. It describes the added benefits of treatment with the COCP as reversible contraception, regulation of menstruation, and reduction in period pain (dysmenorrhoea).

Hysterectomy is a major operation and as such is associated with various risks, including infection, haemorrhage requiring transfusion, damage to the urinary tract and VTE. The patient will require up to a week in hospital and it takes 6-8 weeks to heal properly at home\textsuperscript{20}. Hysterectomy for HMB should be reserved for those patients in whom medical management and subsequently other surgery (i.e. the various ablation techniques) have either failed to provide adequate relief from symptoms or are contraindicated.

NICE have issued technology appraisals\textsuperscript{21} for fluid filled thermal balloon ablation and microwave endometrial ablation. Both these techniques were associated with fewer complications and a shorter recovery period than hysterectomy, without compromising on effectiveness and patient satisfaction. The MEATBall study found no significant clinical
differences in patient satisfaction, menstrual status, quality of life scores or hysterectomy rates between patients undergoing microwave ablation and thermal balloon ablation. A 2013 population based cohort study found that one in six women undergoing endometrial ablation went on to have further surgery for HMB. This demonstrates that there is still a role for hysterectomy in the treatment of HMB. The purpose of this policy is not to replace hysterectomy with alternative treatments, merely to provide a logical progression through treatment options starting with the least invasive, most cost effective, and reserving hysterectomy, with its higher complication rate, for those who really need it.

References:


19. [http://www.nhs.uk/Conditions/Periods-heavy/Pages/Treatment.aspx](http://www.nhs.uk/Conditions/Periods-heavy/Pages/Treatment.aspx)

20. [http://www.nhs.uk/conditions/Hysterectomy/Pages/Complications.aspx](http://www.nhs.uk/conditions/Hysterectomy/Pages/Complications.aspx)
