Heavy Menstrual Bleeding - An Update of Management Options

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Conflicts of interest

DB has attended advisory committees and received support to attend conferences by Bayer Healthcare as part of her role at Family Planning NSW

KB has no conflicts

What is HMB?

What is HMB?

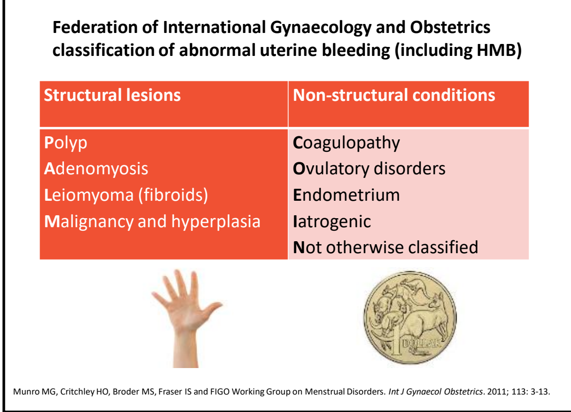
- Excessive menstrual blood loss which interferes with the woman's physical, emotional, social and material quality of life, and which can occur alone or in combination with other symptoms

How common is it?

- Most common presentation of abnormal uterine bleeding in pre-menopausal women affecting 25% of women of reproductive age[1]

1.Royal College of Obstetricians and Gynaecologists. *National heavy menstrual bleeding audit*. London: RCOG, 2014

Federation of International Gynaecology and Obstetrics classification of abnormal uterine bleeding (including HMB)



Structural lesions	Non-structural conditions
Polyp	**C**oagulopathy
Adenomyosis	**O**vulatory disorders
Leiomyoma (fibroids)	**E**ndometrium
Malignancy and hyperplasia	**I**atrogenic
	Not otherwise classified

Munro MG, Critchley HO, Broder MS, Fraser IS and FIGO Working Group on Menstrual Disorders. *Int J Gynaecol Obstetrics*. 2011; 113: 3-13.

What are the management approaches once malignancy is excluded?

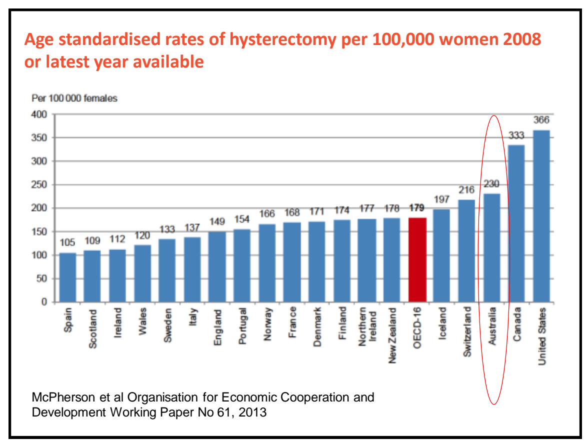
- Pharmaceutical treatment of which the LNG-IUS is the most effective[1]
- Uterine-preserving surgical alternatives to hysterectomy
- Hysterectomy

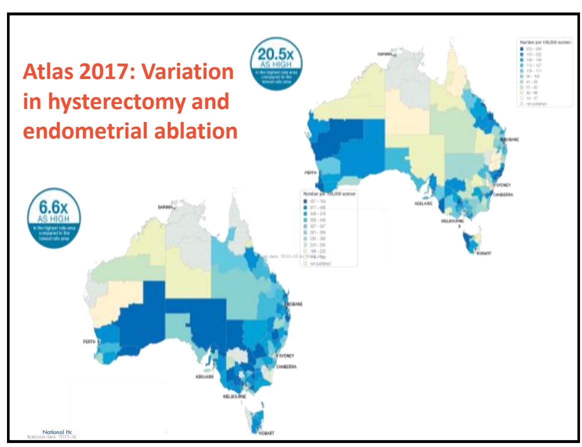
Total hysterectomy

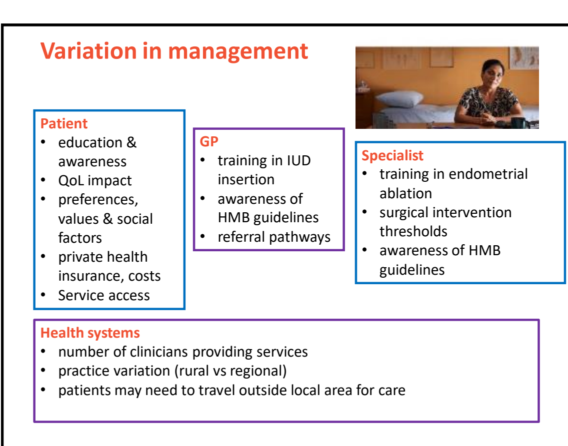
[1]Lethaby et al Cochrane Database Syst rev 2015

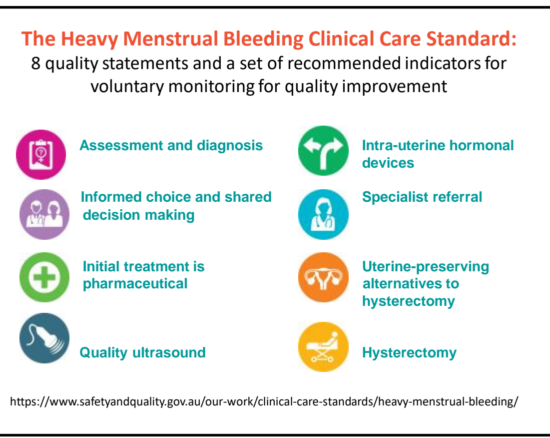
Key considerations in management

- Patient preference
- Likely cause and severity of bleeding
- Age
- CIs to pharmaceutical management
- Desire for future fertility









HMB Case Study

- Sarah 36 years G2P2 de-facto partnership
- Condoms for contraception
- Presents for routine cervical screening
- Increasing HMB for 12 months with clots and flooding
- Thought 'it was normal'
- Feels tired a lot of the time
- Impacting on relationship and work

What else do we need to know?

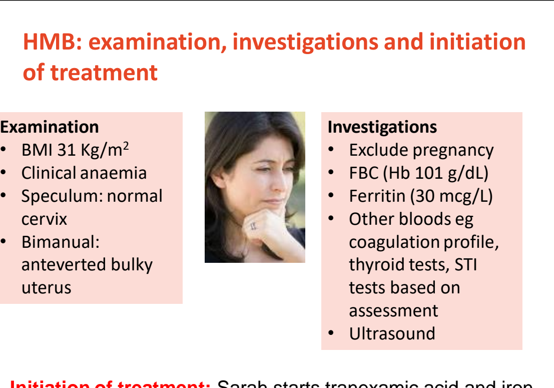
HMB history

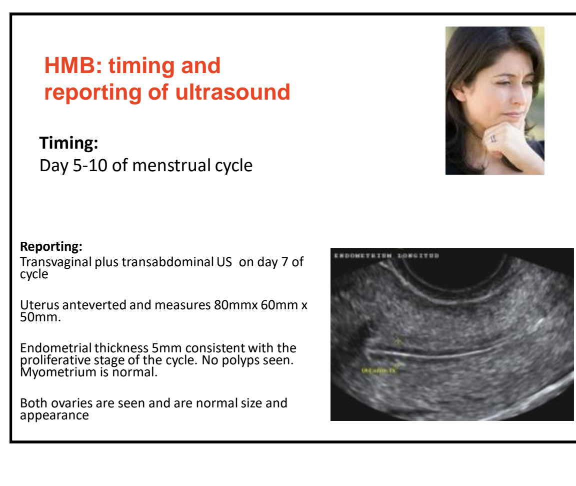
Medical history (thyroid, bleeding disorders), symptoms of anaemia medications

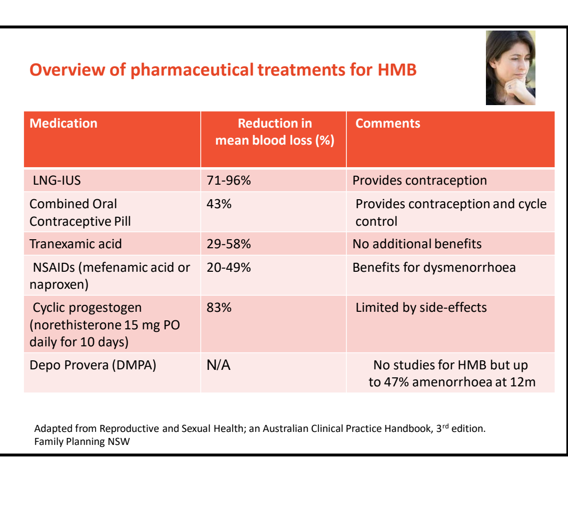
Sexual and Reproductive history contraceptive history fertility plans

Risk factors for endometrial cancer (age, PCOS, obesity, family history)

Menstrual history (sanitary protection, impact on quality of life) Associated symptoms (pain, IMB, PCB)



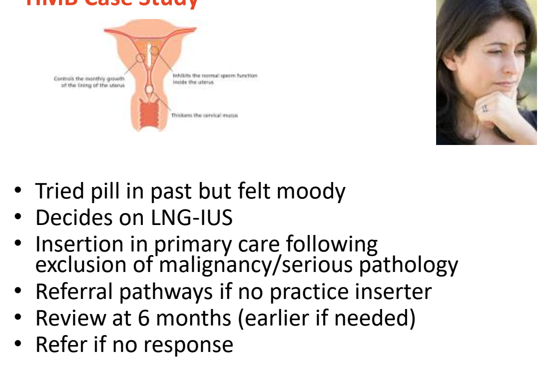


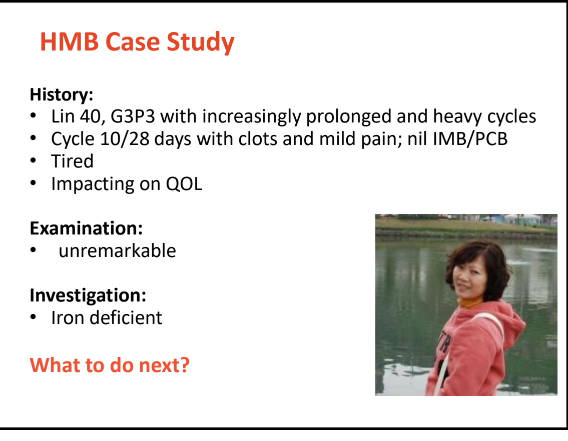


Overview of pharmaceutical treatments for HMB

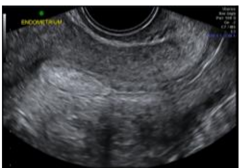
Medication	Reduction in mean blood loss (%)	Comments
LNG-IUS	71-96%	Provides contraception
Combined Oral Contraceptive Pill	43%	Provides contraception and cycle control
Tranexamic acid	29-58%	No additional benefits
NSAIDs (mefenamic acid or naproxen)	20-49%	Benefits for dysmenorrhoea
Cyclic progestogen (norethisterone 15 mg PO daily for 10 days)	83%	Limited by side-effects
Depo Provera (DMPA)	N/A	No studies for HMB but up to 47% amenorrhoea at 12m

Adapted from Reproductive and Sexual Health; an Australian Clinical Practice Handbook, 3rd edition. Family Planning NSW

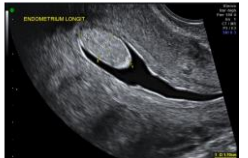




Ultrasound findings - endometrial polyp



Transvaginal scan



Sonohysterogram

Specialist referral:

- Hysteroscopy and polyp removal
- LNG-IUS for contraception

HMB Case study

History:

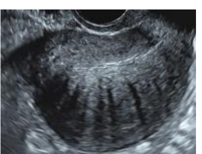
- Maria 42 years same sex relationship
- Heavy and painful periods, 7/28 cycles
- Impacting on QOL

Examination:

- Tender globular uterus

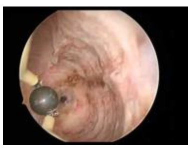
Investigation:

- Ultrasound



The uterine outline is bulbous and the myometrial echotexture is heterogeneous consistent with diffuse adenomyosis

Endometrial ablation



Suits

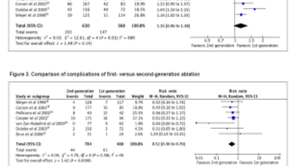
- Women with no future fertility plans
- Normal endometrial cavity
- Cases of benign aetiology of HMB
- Desire to retain uterus or avoid hysterectomy

Risks

- Significant cavity scarring of the cavity; effective contraception essential
- Perforation, bleeding
- Procedure can sometimes be ineffective

Endometrial ablation

- 1st generation under hysteroscopic guidance- rollerball resection
- 2nd generation aimed to make procedure simpler and faster- microwave, bipolar radio frequency ablation, heated balloon system



Compared to 1st generation devices, 2nd generation are:

- as effective
- reduce operating time
- can be used more often with local anaesthesia
- have fewer complications

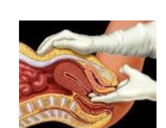
Kroft et al JOGC Nov 2013.

HMB Case Study

- Sahba 38 years, children 10 and 8, no further planned
- Married; withdrawal for contraception
- Worsening HMB for 3 years with clots and flooding
- Unable to go outside the house on first few days
- 30 day cycle, lasts for 6-7 days
- No IMB or PCB

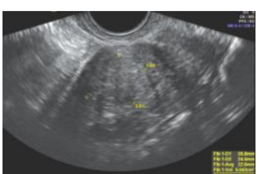
HMB Case Study

Examination



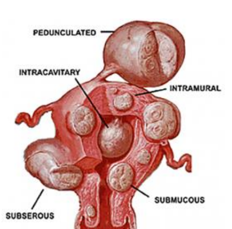
Investigations

Ultrasound findings – intramural fibroids



What are the treatment options?

Options for fibroid management



Depends on
- Size
- Site
- Fertility plans

HMB Case Study

Shared decision making

- COC pill (continuous use)
- Ulipristal acetate
- Uterine artery embolisation
- Myomectomy
- Hysterectomy

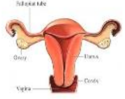
Ulipristal acetate: a selective progesterone receptor modulator

Note currently unavailable because of recent warning from EMA Pharmacovigilance Risk Assessment Committee about liver disease.

Suits women seeking
- Uterus and/or fertility preservation
- Pre-surgery fibroid shrinkage (21-36%)

Risks
- Short term use only -licensed for use for 3m period
- Not always contraceptive – non-hormonal contraception recommended

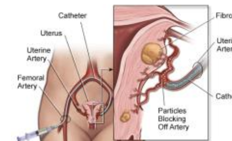
Dose of 5mg daily reversibly blocks P receptor at endometrium and myometrium



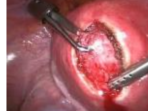
Uterine artery embolisation (UAE)

Suits
- Women with no future fertility plans (may affect ovarian function)
- Single or few large fibroids
- Desire to retain uterus or avoid hysterectomy

Risks
- Fever, pain and discharge
- Perforation, bleeding
- Procedure ineffective



Myomectomy



Suits
- Women seeking uterus and/or fertility preservation
- Removal of one/a few fibroids

Risks
- Often large volume of blood loss
- Uterine rupture in a subsequent pregnancy depending on site and extent of surgery

Hysterectomy

Suits

- Women not seeking uterus and/or fertility preservation
- Definitive and cost effective

Risks

- Irreversibility and consequences for childbearing
- Infection, organ damage and blood loss
- Time in hospital and recovery period depending on procedure

Total hysterectomy

Which treatment for which patient?

Pharmaceutical eg LNG-IUS, COC, tranexamic acid

Uterine preserving alternatives

Does not want to retain fertility

Endometrial ablation

Uterine artery embolisation

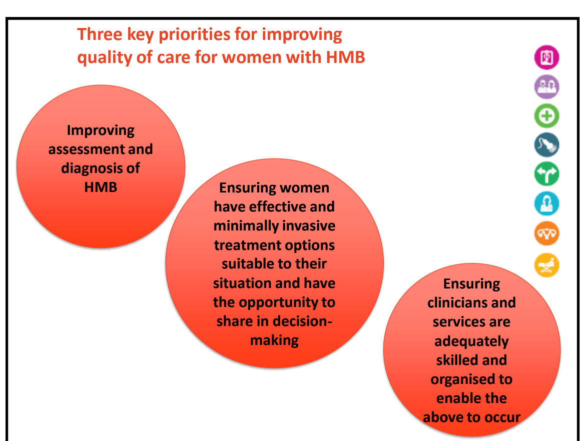
Future fertility desired

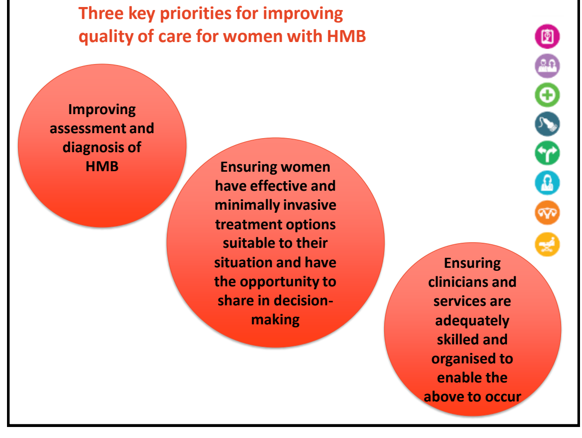
Myomectomy

Polypectomy

Ulipristal acetate

Hysterectomy





HMB take-home messages

- Affects around 25% reproductive age women
- Determine likely cause & impact of bleeding; exclude malignancy, masses, iron deficiency and anaemia
- HMB of benign causes can often be GP managed with pharmaceutical treatments including the LNG-IUS
- Uterine-preserving specialist management includes UPA, UAE and endometrial ablation
- Hysterectomy offers definitive treatment where other treatment options have been ineffective, are unsuitable or it is the woman's informed choice
- Shared decision-making is key.....