

Menorrhagia

Best Care and Practice

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- Menorrhagia = excessive or prolonged cyclical menstrual blood loss

“Heavy periods”

A public health issue

- 10% of all women of reproductive age in developed countries seek help for menorrhagia

Vessey et al 1992.BJOG 99:402

Oehler and Rees 2003 Act Obs Gyn Scand 82:405

Complications

- Reduced quality of life
- Iron deficiency
- Gynecological surgery

- Lost work time
- Increased health costs

Edlund et al 1996. Am J Haem 53:234

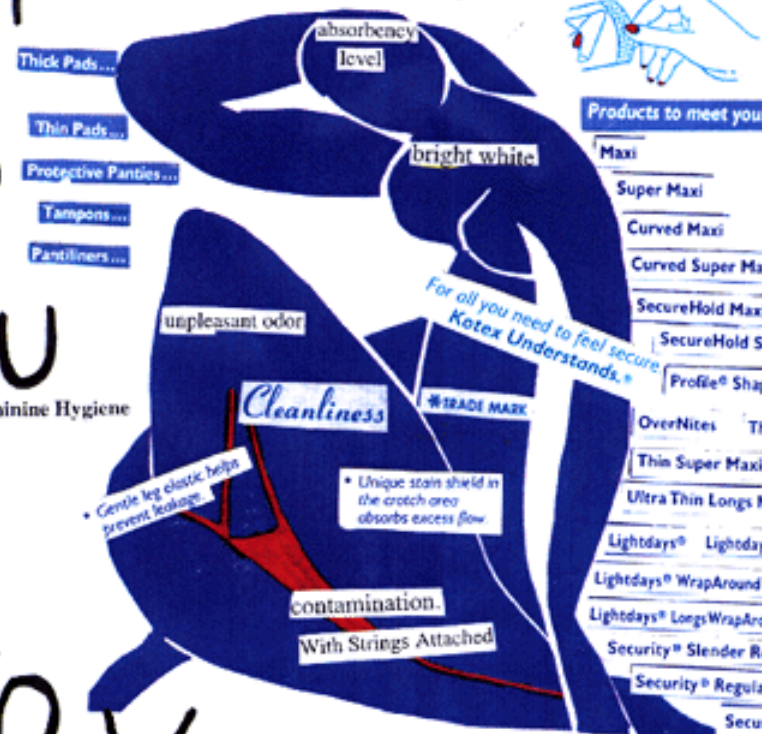
PAY
AS
YOU
FLOW

• Wear these panties as you would your regular panties. Wear feminine protection (pads, tampons or liners) as you normally do.

a more mentally sound form of feminine protection

NEW!

Preferred by Discerning Women Everywhere



- Thick Pads...
- Thin Pads...
- Protective Panties...
- Tampons...
- Pantliners...

Products to meet your EVERY need!

- Maxi
- Super Maxi
- Curved Maxi
- Curved Super Maxi
- SecureHold Maxi
- SecureHold Super Maxi
- Profile® Shaped Maxi
- OverNites
- Thin Maxi
- Thin Super Maxi
- Ultra Thin Maxi
- Ultra Thin Longs Maxi
- Personals™
- Lightdays®
- Lightdays® Longs
- Lightdays® WrapAround™
- Lightdays® LongsWrapAround™
- Lightdays® Oval
- Security® Slender Regular
- Security® Regular
- Security® Super
- Security® Super Plus
- Natural Curved Regular
- Natural Curved Super

KOTEX PERSONALS will help keep your clothing and bedding fresh and clean.





- Definition
- Recognition
- Treatment

What is heavy?

1. Over 80 mls blood loss per cycle
2. Blood loss for more than 7 days
3. Heavy menstrual loss that has an adverse effect on daily life

Hallberg and Nilsson. Scand J Clin Lab Invest 1966; 16:244
Fraser Br J Obstet Gynaecol 1994; 101(S11):3.

Measuring menorrhagia

Alkaline-Haematin method

Collect all used sanitary wear




Extract blood




Analyse chemically in laboratory

Hallberg and Nilsson. Scand J Clin Lab Invest 1966; 16:244

Pictorial bleeding assessment chart

The numbers 1-8 represent the consecutive days of your menstrual period. Please record for each day, the number of pads you used that match each illustration.

Pad	1	2	3	4	5	6	7	8
1 pt/pad 								
5 pts/pad 								
20 pts/pad 								
Clots (Yes/No)								

Tampon	1	2	3	4	5	6	7	8
1 pts/tampon 								
5 pts/tampon 								
10 pts/tampon 								
Clots (Yes/No)								

The numbers 1-8 represent the consecutive days of your menstrual period. Please record for each day, the number of tampons you used that match each illustration.

PBAC of alkaline haematin method in 30 women for menorrhagia >80 mls

- Sensitivity 86%
- Specificity 89%

Higham et al. Br J Obstet Gynaecol 1990;97:734

Is 80mls a useful criterion?

- Less than half of women referred with menorrhagia lose > 80 ml per period
- Rate of loss may be important – flooding
- Does it help identify illness?

Warner et al 2004. Am JOG 190:1224

Is 80mls a useful criterion?

- 226 women referred to gynecology clinic with menorrhagia.
- Questionnaire
- Menstrual blood collection and PBAC

Warner et al 2004. Am JOG 190:1216 and 1224

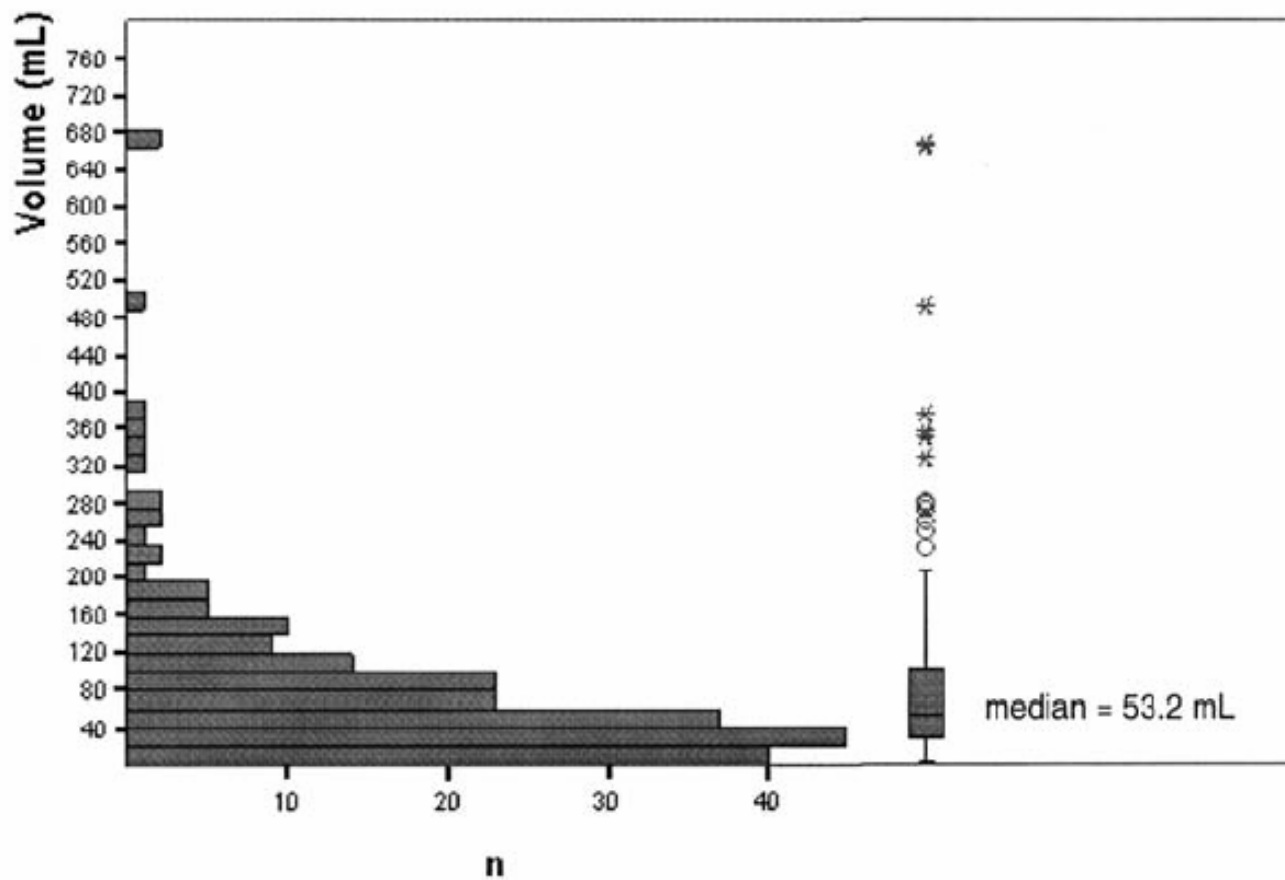
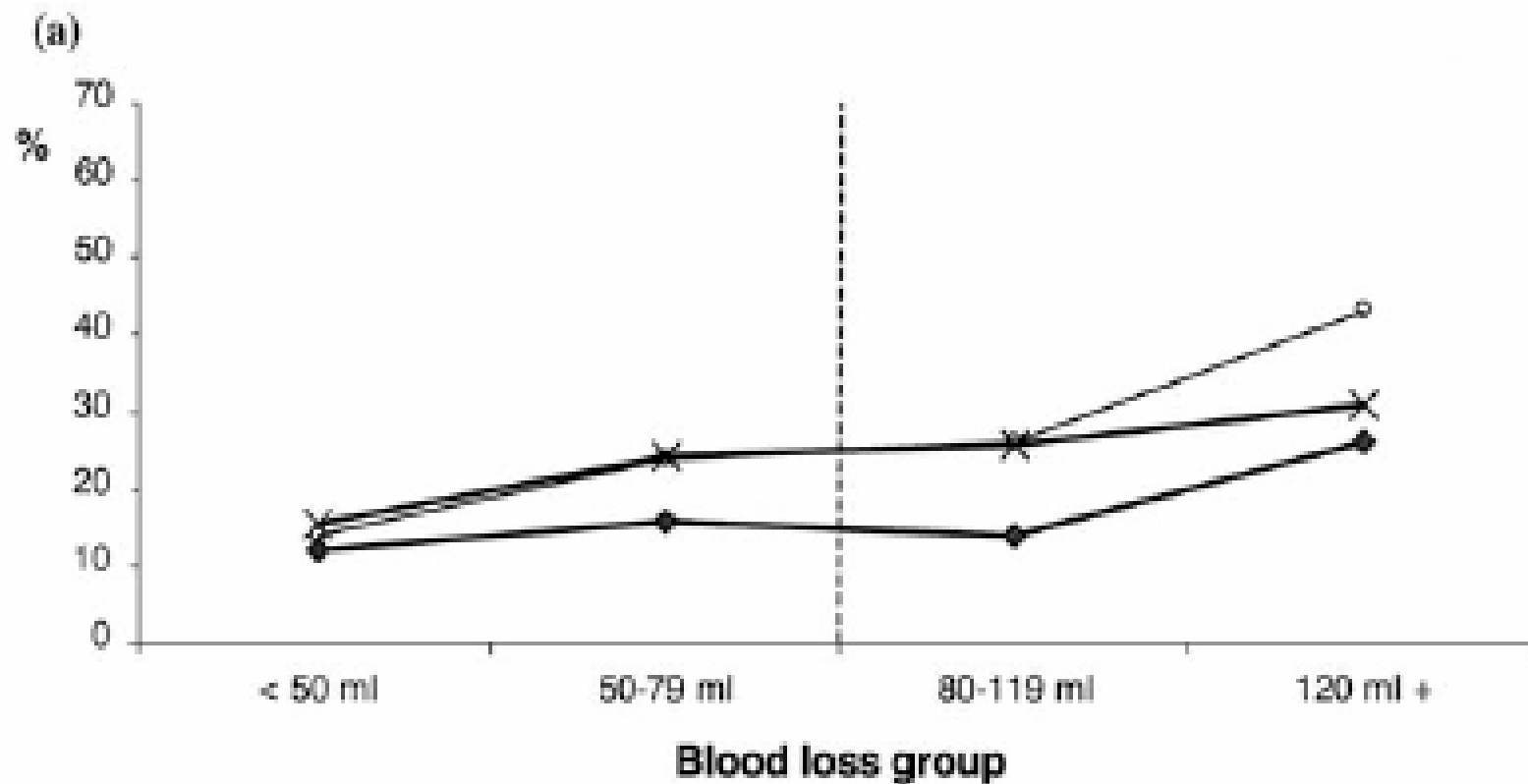


Figure 1 Histogram of measured blood loss, with superimposed box plot (n = 226 participants).

O = Accidents are a severe problem

X = Extra laundry a severe problem

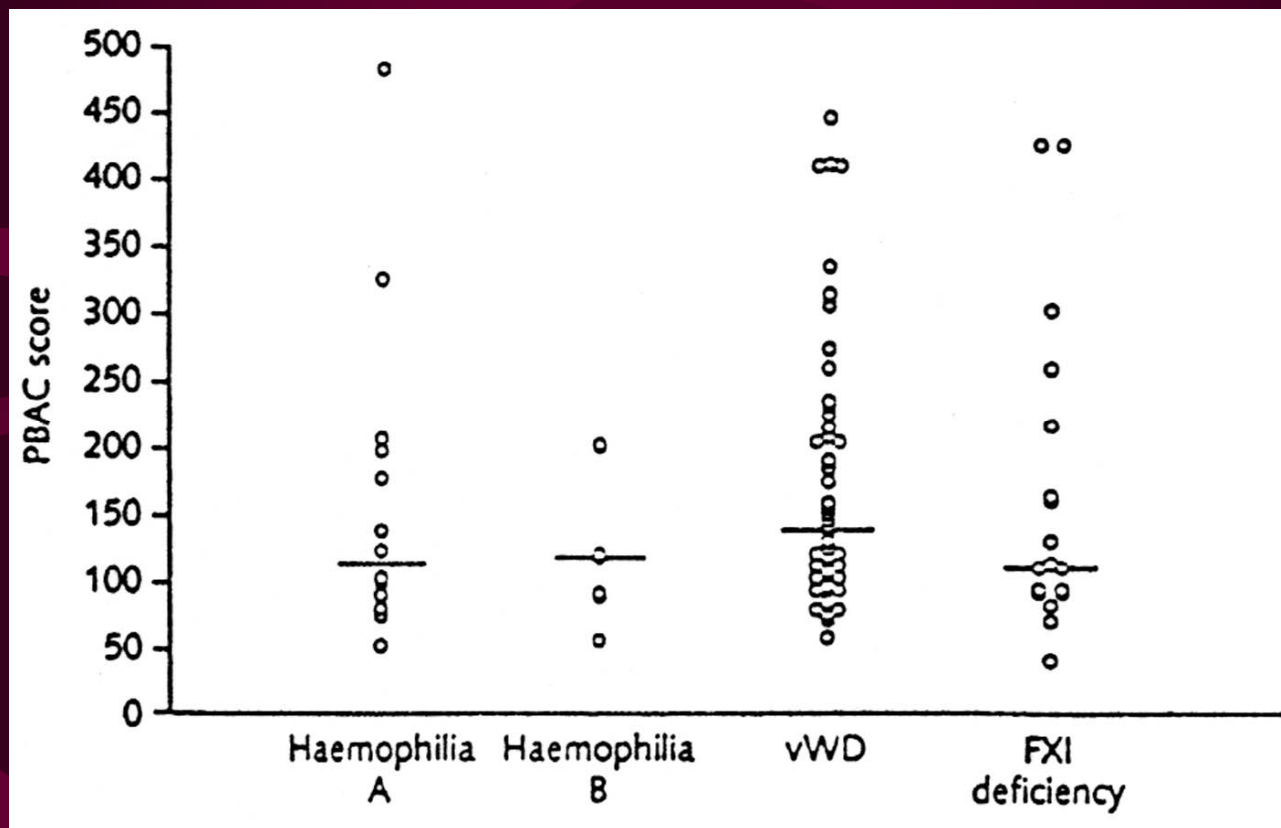
◆ = Impact on daily life cause of seeking help



Warner et al 2004. Am JOG 190:1224

- There was no significant difference in the incidence of gynaecological pathology in women with more than 80 mls loss than in those with lower menstrual losses.

Menorrhagia in congenital coagulation disorders



Kadir R et al. Haemophilia 1999;5:40.

How to diagnose menorrhagia?

- Measuring volume of blood loss as more or less than 80 mls doesn't reliably identify women with gynecological or haematological disorders
- Womens complaints relate to containment more than total volume of blood loss
- Perhaps a definition that includes symptoms and social disability would be more useful

Prevalence of bleeding disorders in women with menorrhagia

Bleeding disorder	Prevalence in women with menorrhagia
Von Willebrands	5-20%
Platelet dysfunction	<1-47%
Factor XI deficiency	<1-4.3%
Haemophila A or B carrier	<1-3.5%
Factor I, II, V, VII, X deficiencies	<1%

James et al. ASH Education 2006; 474.

Recognition of bleeding disorders

- In a 1999, at a US centre, 6 of 7 women (86%) with type I vWd who had had a hysterectomy were diagnosed post-operatively
- In 2001, in a US survey, only 4% obstetrician/gynaecologists considered vWd as a cause of menorrhagia

ACOG. *Obstet Gynecol* 2001;98:1186.

Ragni et al. *Haemophilia* 1999;5:313.

Which women to test for bleeding disorders? - UK

- Menorrhagia since menarche
- Family history of bleeding disorder
- Personal history of excessive bleeding after surgery, dental work or childbirth, bruises >5cm at least once a month, nosebleeds at least once a month, frequent gum bleeds
- Impending surgery

Lee et al. Haemophilia 2006; 12:301.

Women with bleeding disorders also get gynecological pathology

- A survey of women with vWd found that half of the women undergoing hysterectomy for menorrhagia had an additional uterine pathology such as fibroids or endometriosis

Kouides et al. Haemophilia 2000; 6:643.

Prevalence of menorrhagia in women with bleeding disorders (PBAC)

Von Willebrands	84%	Kirtava 2004
FXI deficiency	41%	Bolton-Maggs 1995
Haemophilia carriers	59%	Plug 2006
No bleeding disorder	18%	Bolton-Maggs 1995

Haemophilia carriers



	>60%	40-60%	<40%	Sig for trend
	n=195	n=54	n=51	
XS blood loss	48%	57%	61%	
Relative risk (95% CI)	1.0	1.2 (0.9-1.6)	1.3 (1.0-1.7)	P=0.07

Plug et al. Blood 2006;108:52.



Treatment options

Intervention	Menorrhagia	Menorrhagia and bleeding disorder
Intranasal DDAVP	-	C - conflicting
Antifibrinolytics	A – in favour	C – in favour
COCP	B – in favour	C – conflicting
21 day POP	B – in favour	-
Mirena	A – in favour	B – in favour
Endometrial ablation	A – in favour	C – against
Hysterectomy	A – in favour	-

Kouides and Kadir. J Thromb Haemost 2007; 5S1:175

Tranexamic acid

Antifibrinolytic - inhibits clot breakdown

Normally 1g orally two or three times daily

4g orally daily effective - nausea a problem

2 randomised trials show significant reduction in mean menstrual loss of 94 mls compared to placebo in women in general

Lethaby. Cochrane database 2007:2.

Combined oral contraceptive pill

- Single arm studies suggest efficacy in women in general and von Willebrands disease
- Reliable contraception
- Reduces risk of ovarian cyst rupture
- National Heart Lung Blood Institute vWd guidelines advise front-line for adult/adolescent not desiring pregnancy

Lee et al. Haemophilia 2006;12:301-336

Progesterone only contraception

“Minipill” – reduces menstrual blood loss in women in general

- fatigue, mood changes, weight gain, bloating, headaches, depression, irregular bleeding, loss of bone density and lipid derangements

Injections/implants – long-acting, often cause amenorrhoea. Not evaluated in women with bleeding disorders. Injection is intramuscular.

DDAVP = desmopressin

- Synthetic hormone given iv, sc or intranasal during bleeding
- Effective in non-gynaecological bleeding in type I and some type II vWd, mild haemophilia A, some platelet disorders.
- Fluid retention, facial flushing, palpitations, headache

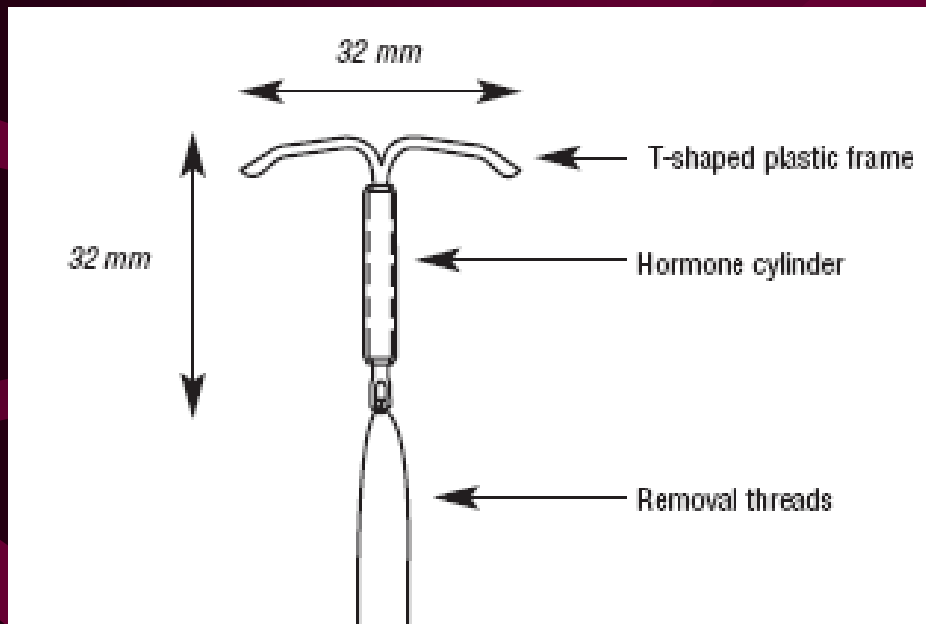
DDAVP for menorrhagia in bleeding disorders

- Double blind placebo-controlled, cross-over study
- 29 women (22 vwd, 3 vwd/FXI, 2 FXI, 2 FVIII deficient haemophilia carriers)
- **Small study but no significant difference detected between DDAVP and placebo.**

Kadir et al. Haemophilia 2002; 8:787

Mirena Intrauterine System

20ug levonorgestrel/24hr
for at least 5 years



Contraception

Spotting

Amenorrhoea

Progesterone effects

Ronnerdag and Odland. Acta Obstet Gynecol Scand 1999; 78:716.

Mirena - trials in menorrhagia

More effective than:-

- Progesterone only pill
- Prostaglandin inhibitors/fibrinolysis inhibitor

Less effective than:-

- Endometrial ablation
- Hysterectomy

in reducing blood loss but no effects on patient satisfaction and quality of life respectively

Lee et al. Haemophilia 2006;12:301

Endometrial ablation

- Increasingly used where medical treatment failed
 - Less major surgery than hysterectomy
 - newer techniques done under local anaesthetic
- Causes infertility
- In women in general, success rate >90% at 3 yrs
- In 7 women with vWd - 3 women required a hysterectomy within 11 months

Rubin et al. Haemophilia 2004; 10:477

Hysterectomy

- The definitive operation
- Highest patient satisfaction
- Major surgery
- Mortality of 0.3 per 1000
- 3% incidence of serious morbidity
- Possible longterm complications include:- fatigue; pelvic pain; urinary and sexual problems.

Maresh et al. Br J Obstet Gynaecol 2002; 109:302

Summary

- Definition could be improved
- Recognition could be improved
- Consider age, childbearing status, and preference in terms of efficacy, side-effects and need for contraception in selecting treatment options
- Ideally manage in a multidisciplinary team including gynecologist and haematologist, in a comprehensive care centre

Lee et al. Haemophilia 2006;12:301.

NOTICE:

"THERE WILL BE NO MORE

MENSTRUATION JOKES, PERIOD."

