Changes before the change

Perimenopausal bleeding

Although some women may abruptly stop having periods leading up to the menopause, many will notice changes in patterns and irregular bleeding. Whilst this can be a natural phase in your life, it may be important to see your healthcare professional to rule out other health conditions if other worrying symptoms occur.

What is menopause?

Strictly defined, menopause is the last menstrual period. It defines the end of a woman's reproductive years as her ovaries run out of eggs. Now the cells in the ovary are producing less and less hormones and menstruation eventually stops.

What is perimenopause?

On average, the perimenopause can last one to four years. It is the period of time preceding and just after the menopause itself. In industrialized countries, the median age of onset of the perimenopause is 47.5 years. However, this is highly variable. It is important to note that menopause itself occurs on average at age 51 and can occur between ages 45 to 55. Actually the time to one's last menstrual period is defined as the perimenopausal transition. Often the transition can even last longer, five to seven years.

What hormonal changes occur during the perimenopause?

When a woman cycles, she produces two major hormones, Estrogen and Progesterone. Both of these hormones come from the cells surrounding the eggs. Estrogen is needed for the uterine lining to grow and Progesterone is produced when the egg is released at ovulation. This ovulation hormone (Progesterone) is needed for pregnancy, but is also important to control the growth of the uterine lining. Too much Estrogen and menstruation becomes heavy; too little Progesterone and the uterine lining is not controlled and becomes thicker. Menstruation then of course becomes heavier still. Think of Estrogen as being the fertilizer on the grass. It is the fertilizer to the uterine lining (endometrium) then and Progesterone on the other hand is the lawn mower and cuts the endometrial grass every month. This explains why menstrual periods become heavier and problematic during the perimenopausal transition (too much Estrogen and not enough Progesterone).

As time goes on, during the transition, Estrogen levels also decrease and the uterine lining then becomes thinner. Ovulation becomes infrequent and especially in the last years before bleeding ceases (the final menstrual period) periods become lighter, more infrequent and then finally stop. This is a time of Estrogen deficiency.

What are the symptoms of perimenopause?

The changes in hormone levels can lead to a varied set of physical and emotional symptoms. As with menstruation in younger life, all women will experience perimenopause differently. While symptoms are common in perimenopause, women will experience different combinations of symptoms, and to varying degrees.

Progesterone Deficiency Symptoms

- Bleeding
  - Short cycles
  - Heavier flow
  - Premenstrual spotting

- PMS
  (Premenstrual Syndrome – often seen during pre-menopause)
  - Moodiness
  - Hot flushes
  - Depression
  - Poor concentration
  - Irritability
  - Anxiety
  - Headaches (menstrual migraine)

Estrogen Excess Symptoms

- Bleeding
  - Too much
  - Too long
  - Too soon
  - Erratic
- Breast tenderness
- Bloating
- Headaches
- Weight gain
- Vaginal discharge

Estrogen Deficiency Symptoms

- Hot flushes, night sweats and heat intolerance
- Insomnia
- Fatigue
- Vaginal dryness
- Headaches

Although the symptoms listed above are common during perimenopause, not everyone will have all of these. Women may have some symptoms, and they may have few or no symptoms. It is still advisable to visit a healthcare professional to discuss the changes, as it is possible that your symptoms could be pointing towards more serious health conditions.

Should I visit my GP?

Many women experience Abnormal Uterine Bleeding (AUB) during perimenopause. AUB is defined as bleeding that differs in frequency, regularity, duration or amount compared to one's regular menstrual bleeding. [1.] Changes to the menstrual cycle often carry no significant consequences [2.]; however, they can have a range of causes. Although it may simply be a symptom of perimenopause, it is still sensible to raise the issue with your healthcare professional. A thorough history and physical examination will indicate the cause of uterine bleeding and help discern the need for further investigation and treatment. [3.] Other investigations for abnormal uterine bleeding include a PAP Smear, Endometrial or Uterine Sampling (Endometrial Biopsy), a Vaginal Ultrasound (Echography), and routine laboratory testing.

What else may cause AUB besides hormonal changes?

The causes are usually benign not malignant:

- Uterine Polyps
- Uterine Fibroids
- Adenomyosis
- Low Thyroid Function (can be seen in 1 in 4 women age 40 to 55)
- Other medical conditions like Haematology (blood problems)

A uterine polyp is an outgrowth of the uterine lining. Fibroids are benign tumours of the uterine muscle – rarely malignant. Adenomyosis is a down growth of the uterine lining into the uterine muscle, often associated with painful periods and painful intercourse.

However the most important cause of AUB is cancer of the uterine lining (Endometrial Cancer). Although this is uncommon (1 in 1000 women) it must be diagnosed early. It is infrequently found during the perimenopause but more commonly associated with postmenopausal bleeding. Diagnosis can be done easily utilizing the methods noted above (Uterine Ultrasound and Endometrial Biopsy). There is usually very heavy bleeding and cancer of the uterus can be associated with risk factors such as Obesity, Diabetes, Polycystic Ovarian Disease, and late menopause (after age 55). These situations are all associated with excess Estrogen and insufficient or no Progesterone.

Other cancers can also be associated with AUB like Cervical Cancer and Ovarian Cancer. These cancers often present with spotting and intermenstrual bleeding. Identification of Cervical Cancer is done by a PAP Smear, and may be associated with bleeding after intercourse. Obviously it is important to see a physician who will investigate thoroughly. Abnormal bleeding in the 40's and during the perimenopausal transition must be taken seriously and investigated appropriately to rule out cancer.

How do I know it's AUB?

In perimenopausal women, AUB can be defined as ovulatory or anovulatory, dependent on whether you are still ovulating. Ovulatory bleeding occurs when you are still producing eggs albeit, they are decreasing. Ovulatory bleeding is associated with typical premenstrual symptoms and sometimes painful periods. Premenstrual spotting is common. Anovulatory bleeding, which is found more frequently during perimenopause compared to the pre-menopause, is often linked to prolonged periods and a heavier flow. [4.] It is this anovulatory bleeding which has a stronger link to endometrial cancer and precancer called endometrial hyperplasia (when the lining of the uterus becomes too thick). [5]

AUB with a history of anovulation (erratic, irregular and heavy periods) should be investigated with an ultrasound of the uterus. This is called sonography. Often there is a thickened endometrium, and an endometrial or uterine biopsy is advised. A premenopausal uterine lining is measured anywhere from 3 to 12 millimetres. Numbers greater than this can be very serious.

When considering your own cycle, there are a few red flags which mean it is time to visit your family doctor:

- Bleeding that requires a new pad every hour for over 24 hours
- Bleeding that lasts over two weeks
- Any bleeding which has been present after the final menstrual period. The timing is variable. Twelve months after the final menstrual period is considered postmenopausal bleeding

If you are concerned about AUB, it can help to keep a record (menstrual calendar) of your symptoms and take these with you when raising the issue with your healthcare professional. This may help with their examination and diagnosis. [6.]

What important concerns affect the risk of endometrial cancer?

As with a number of medical conditions, the risk of endometrial cancer is strongly associated with obesity, [7.] particularly women with a Body Mass Index (BMI) over 30kg/m. [8.] Addressing your BMI may potentially reduce the risk of developing endometrial cancer, as well as having other positive health benefits. Being significantly overweight can also have an impact on treatment options for endometrial cancer. For very obese women, invasive surgery may not be a good option as complications can occur during treatment or during the recovery period. [9]

It's possible that regular physical activity can have a protective effect against endometrial cancer [10.], but more studies are needed to more accurately estimate the magnitude or effect [11.].

Treating anovulatory bleeding with Progesterone and/or the low dose oral contraceptive will prevent endometrial cancers significantly.

Can I relieve the symptoms of AUB?

Living with AUB can be troubling, and it is important to address the root cause before dismissing it as a symptom of perimenopause. Excessive uterine bleeding can have detrimental effects on a woman's quality of life. Not only can AUB cause stress and discomfort, with heavy and unpredictable bleeding, but it can even have an economic impact by causing missed work days. [12.]

What are strategies to cope with AUB?

1. **A healthy lifestyle is important**
   A good diet, regular exercise, smoking cessation, and avoidance of street drugs and opioids are all important. Try to manage stress and alleviate tension in your life.

2. **Increase your iron intake**
   Increased blood loss can lead to anaemia as your body struggles to replenish iron. [13.] Increasing your iron intake can help to reduce the risk of becoming anaemic. Iron rich foods include spinach and other leafy greens, red meat and eggs. You may also find certain breads or cereals have added iron. [14.] It may be necessary to take an iron pill a day or even more. Try to take iron on an empty stomach with Vitamin C, either a tablet or a glass of orange juice. Remember, certain iron tablets can be constipating and you may need direction from your family doctor.

3. **Hormone therapy**
   Using oral contraceptives or daily oral progestogens (Progesterone) can help decrease heavy bleeding and regulate the menstrual cycle. Remember Progesterone will control the uterine lining, thus will supress the growth of endometrial tissues. [15.] Your doctor will be able to advise whether hormone therapy is suitable for you. Individualisation is key in the decision to use this kind of treatment. Remember that smoking is contraindicated if you are utilizing a low dose birth control pill. Personal risk factors, such as age, time since menopause, risk of heart disease, stroke or breast cancer, should all be taken into consideration. [16.]

4. **Anti-inflammatory agents**
   Nonsteroidal anti-inflammatory drugs (NSAIDs) may be prescribed for the first three days of menstruation to reduce blood flow. [17.,18.] NSAIDs may also decrease menstrual cramping. In AUB which is a result of endometrial dysfunction or ovulatory dysfunction, NSAIDs has been shown to reduce menstrual bleeding. [19.] Careful, NSAIDs can irritate a sensitive stomach.

5. **Intrauterine Device (IUD)**

IUDs are an effective form of contraception. Only one type can relieve the symptoms of AUB and control uterine bleeding. This is an IUD containing a progestogen (progesterone) with more than one now available. This small device can easily be inserted into the uterus. As it is activated with progesterone, the hormone locally controls the growth of the uterine lining, where 95% of the hormone acts. Very little is absorbed into the general circulation, thus having few side effects. The first Intrauterine System (IUS), the Levonorgestrel Releasing IUS, has been available since the 1980's, and has been linked with a significant 95% reduction in menstrual blood loss. This occurs within 6 to 12 months and can last up to 5 years. Of course, this is also a very effective form of perimenopausal contraception.

What next?

If you have any concerns about perimenopause, or any of the conditions discussed in this leaflet, please visit your healthcare professional. They will be able to help you explore options for diagnosis, prevention and symptom management, as well as treatment options where needed.

Your doctor may offer other medical treatments, even surgical options after a thorough evaluation. These can include D and C's (dilation and curettage), Polypectomy, Myomectomy (removal of fibroids), and Endometrial Ablation (surgery to permanently thin the uterine lining). Conservative management (preserving the uterus) is more common today than ten years ago. A Hysterectomy (surgical removal of the uterus) may be necessary as a last resort if all else fails.

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References

1. The American College of Obstetricians and Gynecologists (March 2017). "Frequently Asked Questions FAQ095 Gynecologic Problems: Abnormal Uterine Bleeding". *www.acog.org/-/media/For-Patients/faq095.pdf?dmc=1&ts=20170530T2118409798 (Cited May 2017).*
2. (2016). "Abnormal Uterine Bleeding". Journal of Midwifery & Women's Health, 61(4). 522-527.
3. Singh S, Best C, Dunn S, Leyland N, Wolfman WL, et al (May 2013). Clinical Practice – Gynaecology Committee. "Abnormal uterine bleeding in premenopausal women". Journal of Obstetrics and Gynaecology Canada, 35(5):473–479.
4. BlaserFarrukh, Jill; McKee, Nora; Towriss, Kellie (August 2015). "Abnormal uterine bleeding: Taking the stress out of controlling the flow". Canadian Family Physician, 61(8): 693–697.
5. Singh S, Best C, Dunn S, Leyland N, Wolfman WL, et al (May 2013). Clinical Practice – Gynaecology Committee. "Abnormal uterine bleeding in premenopausal women". Journal of Obstetrics and Gynaecology Canada, 35(5):473–479.
6. Tracee Cornforth, (2017). "Is Irregular Bleeding Normal During Perimenopause?". Very Well: *www.verywell.com/bleeding-after-sex-during-perimenopause-3522479* (Cited June 2017).
7. Dr PL Martin-Hirsch, Dr S Ghaem-Maghami (2012). "Endometrial Cancer in Obese Women". Scientific Impact Paper No 32: 2.
8. Foley K, Lee RB. Surgical complications of obese patients with endometrial carcinoma. Gynecol Oncol 1990;39:171–4.
9. Paola A Gehrig et al (2008). "What is the optimal minimally invasive surgical procedure for endometrial cancer staging in the obese and morbidly obese woman?" Gynecologic Oncology, 111(1): 41-45.
10. Weight control and physical activity. In: H. Vaino and F. Bianchini (eds), IARC Handbook for Cancer Prevention Vol. 6, pp. 1–315. Lyon, France: IARC Press, 2002.
11. Rudolf Kaaks, Annekatrin Lukanova, Mindy S Kurzer (2002). "Obesity, Endogenous Hormones, and Endometrial Cancer Risk". Cancer Epidemiology, Biomarkers & Prevention. Volume 11, Issue 12, pp. 1531-1543.
12. Ian S Fraser, Sue Langham, Kerstin Uhl-Hochgraeber, (2014). "Health-related quality of life and economic burden of abnormal uterine bleeding". Expert Review of Obstetrics and Gynecology, 4(2): 179-189.
13. Vercellini P, Vendola N, Ragni G, Trespedi L, Oldani S, Crosignani PG, (1993). Abnormal uterine bleeding associated with iron-deficiency anemia. Etiology and role of hysteroscopy". The Journal of Reproductive Medicine, 38(7): 502-504.
14. EM DeMaeyer et al. (1989). "Preventing and controlling iron deficiency anaemia through primary health care: A guide for health administrators and programme managers". World Health Organization, *www.who.int/iris/handle/10665/39849*.
15. JoAnn V Pinkerton (2015). "Dysfunctional Uterine Bleeding (DUB) (Functional Uterine Bleeding)" . MSD Manual, *www.msdmanuals.com/en-gb/professional/gynecology-and-obstetrics/menstrual-abnormalities/dysfunctional-uterine-bleeding-dub*
16. The North American Menopause Society, the American Society for Reproductive Medicine, and The Endocrine Society (2017). "The experts do agree about hormone therapy." The North American Menopause Society: *www.menopause.org/for-women/menopauseflashes/menopause-symptoms-and-treatments/the-experts-do-agree-about-hormone-therapy* (Cited June 2017).
17. Association of Reproductive Health Professionals, (2008). "Abnormal Uterine Bleeding". *www.arhp.org/Publications-and-Resources/Clinical-Fact-Sheets/Abnormal-Uterine-Bleeding* (Cited June 2017)
18. S. R. Goldsteina, M. A. Lumsdenb and D. F. Archerc, 2017, Abnormal uterine bleeding in perimenopause, Climacteric 2017 (pending publication).
19. Kristen A Matteson et al (2013). "Non-surgical management of heavy menstrual bleeding: A systematic review and practice guidelines". Obstet Gynecol, 121(3): 632-643.
20. Suhair Wreikat et al (2015). "Acceptability and efficiacy of levonorgestrel intrauterine device for treatment of menorrhagia". Journal of Basic and Applied Research International, 2(2): 48-56.
21. Mark Livingstone, Ian S Fraser, (2002). "Mechanisms of abnormal uterine bleeding". Human Reproduction Update, 8(1):60-67.