

FactSHEET

MENSTRUAL PROBLEMS AND HIV

Summary

Many HIV-positive women experience changes in their periods. These changes vary from one woman to another, and they may or may not be related to HIV infection.

What sort of menstrual problems do HIV-positive women experience?

Many women living with HIV have reported changes in their menstrual periods. These changes can include:

- heavier bleeding that lasts longer than usual,
- bleeding or spotting between periods, or
- more frequent periods,
- lighter periods with longer time in between,
- skipped periods, or
- no periods at all.

In addition, some women experience more severe symptoms of PMS (premenstrual syndrome).

What causes these problems?

It's not clear if or how HIV infection affects menstruation. A recent American study of more than 800 HIV-positive women found that, overall, being HIV-positive only slightly increased a woman's chances of having either a very short menstrual cycle (less than 18

days) or a very long cycle (more than 90 days). It seemed, however, that advanced immune deficiency did affect menstrual cycles: women with CD4+ counts below 200 were about 50 per cent more likely to have irregular cycles with 90 days or more between periods. The study also confirmed that the factors that can affect menstruation in HIV-negative women are just as likely to affect women living with HIV.

- Severe weight loss, especially loss of fat, can affect menstruation. Women with very little body fat - such as elite athletes or HIV-positive women with wasting syndrome often don't have periods.
- Long-term substance use or drug abuse can contribute to skipped or stopped periods.
- Chronic illness can affect menstruation. Women living with AIDS may find their periods change while they recover from a serious infection.
- Long-term, constant stress can affect any woman's menstrual cycle.
- Platelets are pieces of blood cells that help blood to clot. Often people living with HIV have lower than normal levels of platelets. In HIV-positive women, low levels of platelets may contribute to heavier bleeding.

- Age can affect menstrual bleeding. Women between the ages of 45 and 55 may be in perimenopause, when their menstrual cycles change and slow down before stopping entirely. Women over 40 may occasionally experience heavier bleeding because they may not ovulate (release an egg) during every menstrual cycle.
- Heavy bleeding may be a sign of pelvic inflammatory disease (PID), a serious bacterial infection.
- The thyroid is a gland located in the throat. It releases hormones that regulate metabolism. If the thyroid is underactive and doesn't release enough hormone (hypothyroidism) or if it's overactive and releases too much (hyperthyroidism), menstrual periods can be affected.
- Aspirin can thin blood, making it less likely to clot. High doses of aspirin can contribute to longer, heavier periods.
- Some herbal preparations may contain herbs that affect menstruation. If you're taking herbal medicines and having menstrual problems, get some advice from a naturopathic doctor, a herbalist, or an experienced staff member at a health food store. At the right dose, herbs like black cohosh, raspberry root, or rue may relieve menstrual symptoms. However, other medicines you're taking can interact with herbs and change their effects.
- There have been a few anecdotal reports but no clinical studies suggesting that the protease inhibitor ritonavir (Norvir) may cause heavier and longer periods.

Diagnosis

Any changes in periods should be discussed with your primary care doctor and with a gynecologist (a doctor who specializes in women's reproductive health). It's important to look beyond HIV infection for what may be causing your menstrual problems. Heavy periods can lead to anemia – a lower than normal level of hemoglobin (the protein that carries oxygen to every cell in the body) or of red blood cells - a condition that can leave

you feeling tired all the time. Not having a period may mean that the lining of the uterus keeps building up, which could, over the long term, lead to uterine cancer. Painful periods may be "normal" or they may be caused by endometriosis – a painful condition that occurs when the type of cells that normally line the inside of the uterus start growing in other places (such as the ovaries or Fallopian tubes).

To help diagnose the source of your problems, your doctor may do several tests, including:

- a pregnancy test if you've missed a period,
- blood tests to check levels of platelets, red blood cells, hemoglobin, and thyroid hormone levels,
- a pelvic examination to check for pain or swelling,
- a Pap smear, done during the pelvic exam. For this test, the doctor inserts a tiny brush and a small wooden spatula into the vagina and rubs them over the cervix, to loosen and collect cells. The cells are smeared on a glass slide that is sent to the lab for study.

While having the pelvic exam, you may also be tested for infections such as yeast, chlamydia, or gonorrhea. For these tests, the doctor inserts a long Q-tip into the vagina and swabs it around. The Q-tip is removed and sent to the lab for study.

You may be sent for a transvaginal ultrasound test. In this procedure, the ultrasound technician inserts a thin, condom-covered instrument into the vagina. Transvaginal ultrasound produces clearer images of the internal organs than ordinary ultrasound.

To help analyze changes in your menstrual cycle, you could keep a menstrual diary for three or four months. Your doctor may have a printed form that you can use or you may prefer to use a calendar. The first day of bleeding is counted as the first day of your cycle. Make notes about how long the bleeding lasts, if you use more or fewer tampons or pads than usual, if you have any bleeding or spotting after your period, or if you have unusual cramping or pain. Menstrual diaries

can also be useful to chart PMS symptoms, both physical (bloating, headaches, bowel movements, and so on) and emotional (tension, depression, anxiety, and so on).

If no clear cause for your menstrual irregularities can be found at first, it may be useful to discuss the problems with your whole health-care team - doctors, pharmacist, naturopath, herbalist, support group, friends. Their different approaches and experiences may help in dealing with the problem.

Treatment

Treatment for menstrual irregularities will vary, depending on the problem and what's causing it.

Using an effective anti-HIV drug cocktail (also known as highly active antiretroviral therapy or HAART) can reduce viral load, improve CD4 counts, and greatly lower the risk of developing the infections that lead to AIDS. It may also allow women to gain weight, especially body fat, which may in turn help regulate periods.

Some HIV-positive women with wasting syndrome may have low levels of the hormone testosterone. Although testosterone is usually thought of as a male hormone, women's bodies also produce it in much smaller amounts. Researchers tested a daily testosterone skin patch on a small group of women with wasting syndrome and low testosterone. The low dose used (150 micrograms daily) was just enough to bring testosterone levels up to normal. Six of the women had no menstruation before they took part in the study. After 12 weeks of treatment, five of the six women had their periods return.

Low platelet levels can be treated with AZT, corticosteroids, or platelet transfusions.

Pelvic inflammatory disease (PID) can be treated with oral or injected antibiotics.

Underactive or overactive thyroids can be treated with thyroxine, a small daily hormone pill.

"Normal" painful periods can be treated with anti-inflammatory drugs like Anaprox or Ponstan.

Living with PMS

The physical and emotional symptoms of PMS usually develop one to 14 days before menstruation. Although almost all women experience some signs of PMS, many HIVpositive women have reported increased and more intense symptoms. There are almost as many remedies for PMS as there are symptoms, and you may have to try several different approaches or combinations before finding something that works for you.

A change in diet about two weeks before your period may help with PMS. Many experts recommend cutting down or cutting out caffeine and sugar (which may stimulate symptoms), salt (which can increase bloating), and alcohol (which may make depression worse).

Some women have found that regular exercise helps relieve PMS symptoms.

A daily supplement of 50 to 200 mg of vitamin B₆ along with 200 to 800 IU of vitamin E may also help. The daily dose of amprenavir (Agenerase) already contains 1,744 IU of vitamin E, so anyone using this protease inhibitor should not take extra vitamin E.

Evening primrose capsules may help reduce breast pain, bloating, grouchiness, and depression. Try one or two capsules twice a day during the first two weeks of your cycle, then increase the dose to six capsules a day in the last two weeks.

Taking Anaprox, Ponstan, or Motrin (antiinflammatory drugs that relieve cramps) for a week or so before your period may reduce PMS symptoms.

There are several prescription drugs that may help with the severe emotional symptoms of PMS. Ativan can be useful for anxiety, and Prozac and Xanax can improve mood swings, irritability, and depression.

The bottom line

HIV-positive women can experience a wide range of menstrual problems that may not be directly related to HIV.

These problems should be thoroughly checked out by a primary care doctor and/or a gynecologist.

If the source of the problem is found, it can often be treated. Even if there is no clear cause, there are many treatments to relieve the symptoms.

Credits

Author: Deirdre Maclean

Reviewed by: Jean Marmorea, MD, CCFP

Created: March 2000

Design: Renata Lipovitch

References

Chirgwin KD, Feldman J, Muneyyirci-Delale O, et al. Menstrual function in human immunodeficiency virus-infected women without acquired immune deficiency syndrome. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 12:489-494, 1996.

Ellerbrock TV, Wright TC, Bush TJ, et al. Characteristics of menstruation in women infected with human immunodeficiency virus. *Obstetrics and Gynecology* 87:1030-4, 1996.

Grinspoon S. Gender specific differences in body composition and glucose metabolism in HIV infected women, the prevalence of hyperinsulinemia, and the role of testosterone. Oral presentation at the 1999 *National Conference on Women and HIV/AIDS: Navigating the New Millennium through Collaboration*, October 9-12, 1999; Los Angeles.

Harlow SD, Schuman P, Cohen M, et al. Menstrual function and HIV serostatus. [Abstract 461] 6th *Conference on Retroviruses and Opportunistic Infections*, Chicago, 1999.

Nielsen H. Hypermenorrhoea associated with ritonavir. *Lancet*,353(9155):811-812.

Rosenthal MS. *The Gynecological Sourcebook*. Update edition. Lowell House, Los Angeles. 1997.

Shah PN, Smith JR, Wells C, et al. Menstrual symptoms in women infected by the human immunodeficiency virus. *Obstetrics and Gynecology* 83:397-400, 1994.

Disclaimer

Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV-related illness and the treatments in question.

The Canadian AIDS Treatment Information Exchange (CATIE) in good faith provides information resources to help people living with HIV/AIDS who wish to manage their own health care in partnership with their care providers. Information accessed through or published or provided by CATIE, however, is not to be considered medical advice. We do not recommend or advocate particular treatments and we urge users to consult as broad a range of sources as possible. We strongly urge users to consult with a qualified medical practitioner prior to undertaking any decision, use or action of a medical nature.

We do not guarantee the accuracy or completeness of any information accessed through or published or provided by CATIE. Users relying on this information do so entirely at their own risk. Neither CATIE nor Health Canada nor any of their employees, directors, officers or volunteers may be held liable for damages of any kind that may result from the use or misuse of any such information. The views expressed herein or in any article or publication accessed or published or provided by CATIE are solely those of the authors and do not reflect the policies or opinions of CATIE or the official policy of the Minister of Health Canada.

Permission to reproduce

This document is copyrighted. It may be reprinted and distributed in its entirety for non-commercial purposes without prior permission, but permission must be obtained to edit its content. The following credit must appear on any reprint: *This information was provided by the Canadian AIDS Treatment Information Exchange (CATIE). For more information, contact CATIE at 1.800.263.1638.*

Contact CATIE

by telephone

1.800.263.1638 416.203.7122

by fax

416.203.8284

by e-mail

info@catie.ca

on the Web

http://www.catie.ca

by mail

505-555 Richmond Street West Box 1104 Toronto, Ontario M5V 3B1 Canada





Funding has been provided by Health Canada, under the Canadian Strategy on HIV/AIDS.