

Information Handout

Provided by the National Anemia Action Council, Inc., a nonprofit corporation.



Anemia & HIV/AIDS

What is anemia?

Anemia is a below-normal level of hemoglobin* or hematocrit*. Hemoglobin is the protein in red blood cells that carries oxygen to all parts of the body. Anemia can be a temporary condition, a consequence of other health conditions, or it can be a chronic problem. People with mild anemia may not have any symptoms or may have only mild symptoms. People with severe anemia may have problems carrying out routine activities and can feel tired or experience shortness of breath with activity.¹

How common is anemia in people with HIV/AIDS?

The chance of developing anemia becomes greater with AIDS.¹ Anemia occurs in about 30% of people with HIV, but the rate is 75-80% of people with AIDS.²

What causes anemia in people with HIV/AIDS?

There are many causes of anemia in HIV and AIDS patients. As a result of the inflammation associated with HIV/AIDS, you may not be able to produce enough red blood cells. Less common causes for HIV-associated anemia include vitamin B₁₂ deficiency and the autoimmune destruction of red blood cells.¹ Some of the early drugs used to treat HIV/AIDS, such as AZT, were shown to be a possible cause of anemia.³ However, the newer HAART drugs are much less likely to cause anemia.⁴

What are the effects of untreated anemia in HIV/AIDS?

Fatigue and other symptoms associated with anemia can interfere with daily activities. Anemia also increases the chance that HIV infection will progress to AIDS. Studies show people with HIV and those with AIDS who are anemic have a shorter life expectancy than people without anemia.^{5,6} While managing anemia may be life saving in some circumstances, treatment has not proven to guarantee a longer lifespan.

How do I know if I have anemia?

The best way to determine if you have anemia is to discuss your blood counts and changes in hemoglobin and hematocrit with your doctor. Symptoms usually develop when anemia is moderate to severe, and can include fatigue, weakness, pale skin, chest pain, dizziness, irritability, numbness or coldness in your hands and feet, trouble breathing, a fast heartbeat, and headache. It is important to see your doctor on a regular basis in order to be tested for possible anemia.

What treatments are available to help me?

If you have anemia-associated vitamin deficiencies, correction of these deficiencies is recommended. Certain people with severe anemia may need a blood transfusion;⁷ however, transfusions are avoided whenever possible in HIV/AIDS patients because transfusions have been shown to increase the risk of opportunistic infections and death.^{8,9} Drugs that stimulate the production of red blood cells have been approved for treating anemia in HIV/AIDS. These drugs reduce the need for blood transfusions in people with HIV/AIDS, improve energy levels, and suggest an overall improvement in quality of life.^{10,11} Close communication with your doctor will help him or her provide the treatment that is best for you based on what is causing the anemia.

Glossary

Autoimmune destruction: Body destroys its own cells

AZT: zidovudine, an antiviral drug

Blood transfusion: Transfer of blood or any of its parts to a person

HAART: Highly Active Anti-Retroviral Therapy

Hematocrit: Percentage of red blood cells in a blood sample

Hemoglobin: Protein carried by red blood cells that transports and delivers oxygen throughout your body

Inflammation: Your body's response to injury or irritation; often associated with pain, redness, heat, and/or swelling

Opportunistic infections: An infection suffered by a person whose immune system is not working normally

Continued...

*Normal Lab Values: Normal hemoglobin >12 g/dL for women, >13 g/dL for men; normal hematocrit >36% for women, >39% for men.

Anemia & HIV/AIDS ...Continued

References

1. National Anemia Action Council. Anemia: A Hidden Epidemic. Los Angeles, CA: HealthVizion Communications, Inc; 2002.
2. Levine AM, et al. J Acquir Immune Defic Syndr. 2001;26:28-35.
3. Bain BJ. Curr Opin Hematol. 1999;89-93.
4. Servais J. J Acquir Immune Defic Syndr. 2001;28:221-225.
5. Sullivan P. J Infect Dis. 2002;185(suppl 2):S138-S142.
6. Volberding P. Clin Ther. 2000;22:1004-1020.
7. Claster S. J Infect Dis. 2002;185(suppl 2):S105-S109.
8. Moore RD, et al. J Acquir Immune Defic Syndr. 1998;19:29-33.
9. Sloan E, et al. Transfusion. 1994;34:48-53.
10. Abrams DI, et al. Int J STD AIDS. 2000;11:659-665.
11. Volberding P. J Infect Dis. 2002;185(suppl 2):S110-S114.

NAAC's Online Resources for Patients & Consumers (www.anemia.org)

Information Handouts – Educational handouts describing anemia caused by different conditions including: aging, cancer, diabetes, vitamin deficiency, chronic kidney disease and more; free print or download access

Frequently Asked Questions – Answers to patients' common questions regarding anemia

Anemia Glossary – Definitions for medical terms relating to anemia which are used in NAAC's educational material

Feature Articles – Short articles covering anemia-related topics for patients, caregivers and allied healthcare providers

Anemia Watch – Our free quarterly e-newsletter covering current anemia-related topics and news

Anemia Symptoms Quiz – Printable questionnaire to fill out and take to a physician

Information Handout Disclaimer

This educational material is designed to assist you in your discussion with health care professionals. It is not intended for use as the primary basis for medical judgments or decisions and does not replace personal consultation with your doctor, nurse, pharmacist, etc. NAAC disclaims responsibility and liability for the use of any information obtained from this educational material. All of the content comprising this work is the sole and exclusive property of NAAC and may be copied, reproduced, distributed, displayed, posted or transmitted with consent from and proper attribution to NAAC. The content of this handout was developed independently and without any input from the sponsors.