





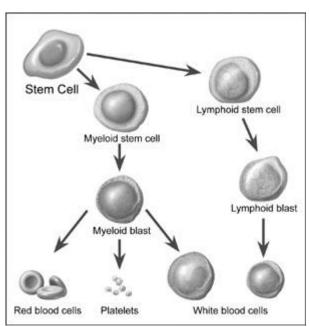
# **December Is National Aplastic Anemia Awareness Month**

### What Is Aplastic Anemia?

Aplastic anemia is a non-cancerous disease that occurs when the bone marrow stops making enough blood cells. The body makes three types of blood cells:

- red blood cells, which contain hemoglobin and deliver oxygen to all parts of the body
- white blood cells, which help fight infection
- platelets, which help blood clot when you bleed

These blood cells are made in the bone marrow, which is the soft, sponge-like material found inside bones. The bone marrow contains immature cells called stem cells that produce blood cells. Stem cells grow into red cells, white cells, and platelets or they can make more stem cells. In patients who have aplastic anemia, there are not enough stem cells in the bone marrow to make enough blood cells.



Picture of blood cells maturing from stem cells.

Experts believe that aplastic anemia is an autoimmune disorder. This means that the patient's immune system (which helps fight infection) reacts against the bone marrow and the bone marrow is not able to make blood cells. Stem cells are no longer being replaced and the remaining stem cells are unable to keep up with the demands. Therefore, the amount of red cells, white cells, and platelets begin to drop. If blood levels drop too low, a person can feel very tired (from low red cells), have bleeding or bruising (from low platelets), and/or have many or severe infections (from low white cells).

## What Are the Key Statistics About Aplastic Anemia?

Aplastic anemia can occur in anyone of any age, race, or gender. There are between 600-900 new cases in the United States each year. Aplastic anemia is more common among children, young adults, and older adults. It is also more likely to occur in people of Asian heritage.

#### Who's At Risk?

In most cases of aplastic anemia, the cause is unknown. This is called **idiopathic** aplastic anemia. **Acquired** aplastic anemia refers to those cases where factors from the environment and physical conditions seem to be linked with the growth of the disease. Studies have shown that this disease can be caused by certain toxins such as benzene and radiation, viruses such as hepatitis, and some medicines. It is more common among women who are pregnant. It is **not** contagious. In rare cases, aplastic anemia can be hereditary (passed from parent to child by information contained in the genes). This occurs with diseases such as Fanconi's anemia, Dyskeratosis Congenita and Shwachman-Diamond syndrome.

## What are Signs and Symptoms of Aplastic Anemia?

The symptoms of aplastic anemia are:

- Fatigue or lack of energy
- Shortness of breath when active
- Pale color of the skin and mucous membranes (this includes the lining of the inside of the nose and mouth)
- Dizziness
- Decreased alertness
- Bleeding from the nose, mouth, or rectum
- Easy bruising
- Pinpoint red spots on the skin
- Frequent and severe infections

Having one or more of these symptoms does not mean that you have aplastic anemia since they can occur with many other illnesses. It is very important to talk to your healthcare team if you have any of these symptoms.

# Can Aplastic Anemia Be Found Early?

There is no screening test for early detection of aplastic anemia. A simple blood test that measures the levels of blood cells can alert your doctor if there is a problem. You should see your doctor each year for a routine exam and promptly tell them about any symptoms you may have. If your doctor thinks that you may have aplastic anemia, you will need to see a hematologist. This is a doctor whose focus is treating problems of the blood and bone marrow.

## Can Aplastic Anemia Be Prevented?

Avoiding exposure to insecticides, herbicides, organic solvents, paint removers, benzene, and other toxic chemicals might lower your risk of the disease.

#### **Cancer Prevention Trials at Rutgers Cancer Institute of New Jersey**

If you would like information about clinical trials for preventing cancer, please call Rutgers Cancer Institute of New Jersey's Office of Human Research Services at 732-235-7356. For additional information about nationwide cancer prevention trials, you can call the National Cancer Institute at 1-800-4 CANCER or visit their website at <a href="https://www.cancer.gov">www.cancer.gov</a>.

#### Where Can I Find Further Information?

Resource and Learning Center
www.cinj.org/rlc
732-235-9639
Provides reliable, relevant and current information about all aspects of cancer.

Aplastic Anemia and MDS (Myelodysplastic Syndromes) International Foundation, Inc. P.O. Box 613
Annapolis, MD 21404
www.aamds.org
(800) 747-2820



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