

Ready to start planning your care? Call us at [800-525-2225](tel:800-525-2225) to make an appointment.

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Memorial Sloan Kettering  
Cancer Center

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## Aplastic Anemia Diagnosis

Children with aplastic anemia can have symptoms that come on quickly, including fatigue, weakness, dizziness, infections, and excessive bleeding. If we suspect your child has aplastic anemia, we'll perform blood and bone marrow tests to rule out inherited bone marrow failure syndromes that cause similar symptoms and related effects.

## Aplastic Anemia Symptoms

Aplastic anemia may be diagnosed in asymptomatic patients who are incidentally found to have abnormal blood counts.

Aplastic anemia most commonly presents with recurrent infections due to low neutrophil count, bleeding due to low platelets or fatigue and malaise associated with low hemoglobin.

Patients may present with severe or recurrent infections such as pneumonia, sepsis, urinary tract infection (UTI) or hemolytic anemia and/or blood clots (suggestive of PNH).

In some cases, patients have physical signs of a previously unrecognized inherited bone marrow disorder (short stature, bone, skin or nail abnormalities for example).

## Aplastic Anemia Causes

In many cases, an underlying cause is not found (classified as idiopathic), but an autoimmune destruction of stem cells is suspected. In some cases, inherited genetic mutations are found to cause aplastic anemia. Other causes include:

radiation  
toxins  
medications  
viral infections  
or clonal abnormalities

## Aplastic Anemia Treatment

The best treatment for aplastic anemia is a [stem cell transplant](#) from a matched donor (also known as allogeneic stem cell transplantation), preferably a healthy sibling. Using this approach, doctors at MSK Kids can cure aplastic anemia in children about 90 percent of the time. Before the transplant, we give your child mild [chemotherapy](#) and [immunotherapy](#) to suppress the immune system. These are usually very well tolerated by young people.

If your child does not have a matched sibling who can donate bone marrow, our doctors will treat him or her with medications that suppress the immune system. Our goal is to prompt his or her stem cells to produce healthy blood cells. While this treatment often results in a cure, some children can experience a recurrence of bone marrow failure or develop another blood disease called [myelodysplastic syndrome](#) (MDS), where blood cells become abnormally shaped and reproduce uncontrollably. For this reason, we monitor patients who undergo treatment with immunosuppression very carefully for years.

The third treatment option for bone marrow failure in children with aplastic anemia is a stem cell transplant from a matched donor who is not related to your child, or one from a mismatched relative. We take a less intensive approach that involves low-dose [chemotherapy](#) and removal of certain T cells from the transplanted stem cells to reduce the risk of complications. This also makes the treatment more tolerable. Your care team will let you know which treatment approach is best for your child.

### New Patient Appointments

Call [833-MSK-KIDS](#) Available Monday through Friday, 9 a.m. to 5:30 p.m. (Eastern time)

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