



Bone Marrow Transplant: Acute Graft versus Host Disease (GVHD)

Graft-versus-Host disease (GVHD) often occurs after allogeneic bone marrow transplants (BMT). In GVHD, the donor's bone marrow attacks the patient's organs and tissues, making them less able to function well. About half of all patients who have had an allogeneic BMT, develop GVHD. GVHD can be a minor, short-term problem or a serious, life-threatening disease.

There are two types of GVHD: Chronic and Acute. Acute GVHD most often occurs in the first 100 days after a bone marrow transplant. The first sign is often a skin rash. It may appear on the patient's hands and feet. The rash can spread to other parts of the body. Usually, it develops into general redness that looks like sunburn. Stomach cramps, nausea and watery diarrhea are signs of GVHD of the stomach or intestines. Jaundice (yellow skin and eyes) can mean Acute GVHD has affected the liver.

Diagnosis and Staging

Acute GVHD may be mild, moderate, severe or life-threatening (see chart). Doctors diagnose the stage of the disease by closely watching for symptoms. A biopsy of the skin, intestines or liver may also be needed to confirm the diagnosis.

Stages of Acute GVHD	
Stage 1 (mild)	<ul style="list-style-type: none">▪ A skin rash over less than 25% of the body.
Stage 2 (moderate)	<ul style="list-style-type: none">▪ A skin rash over more than 25% of the body, plus▪ Mild liver or stomach and intestinal problems.
Stage 3 (severe)	<ul style="list-style-type: none">▪ Redness of the skin, similar to a severe sunburn, plus▪ Moderate liver, stomach and intestinal problems.
Stage 4 (life-threatening)	<ul style="list-style-type: none">▪ Blisters, peeling skin▪ Severe liver, stomach, and intestinal problems.

Treatment

Your doctor will talk with you about the best treatment for GVHD.

To reduce the risk of acute GVHD, BMT patients are given special drugs before and after a transplant. Cyclosporine and methotrexate are two drugs that may be used. These drugs suppress the immune system, but they also increase the risk of infection. That is why we must take steps to limit the child's exposure to harmful germs.

If your child develops GVHD, steroid drugs will probably be given also. These drugs are usually given for several months to make sure that the GVHD is under control. The doctor may also prescribe creams to put on the skin. Your child's skin is sensitive at this time, so it is important to stay out of the sun. Whenever your child is outside, apply a sunscreen with an SPF (sun protection factor) of at least 30.

If you have any questions, please ask your child's doctor or nurse practitioner.