

# ALLOGENEIC TRANSPLANT: GRAFT-VERSUS-HOST DISEASE

Graft-versus-host disease (GVHD) is a common, and sometimes serious, side effect of an allogeneic transplant. An allogeneic transplant uses blood-forming cells donated by someone else. GVHD can range from mild to severe. Many patients will have some symptoms of GVHD after an allogeneic transplant.

## Read on to learn about:

- The 2 types of GVHD
- How to lower your risk of getting GVHD
- Signs and symptoms of GVHD
- Treatment for GVHD

## WHAT IS **GVHD**?

GVHD happens because of differences between the donated cells (the graft) and your body's cells (the host). Your new cells from your donor might see your body's cells as different and attack them.

## There are 2 types of GVHD:

- **Acute GVHD** – Can happen in the early weeks and months after transplant. Some transplant recipients don't have any acute GVHD.
- **Chronic GVHD** – Can develop 3-6 months after transplant, but signs can show up earlier or later. You are more likely to develop chronic GVHD if you've had acute GVHD.

## LOWER YOUR RISK OF GETTING GVHD

Many people who have had an allogeneic transplant will have some symptoms of GVHD despite the transplant team's best efforts to prevent it. Here are some steps you can take to lower your risk:

### 1. Take your medicine

Your doctor will give you medicine to help prevent GVHD. Keep taking that medicine as directed, even if you're feeling healthy. Call your doctor right away if you can't take the medicine for any reason. Even with medicine, some people still get GVHD.

### 2. Watch for early warning signs and tell your doctor

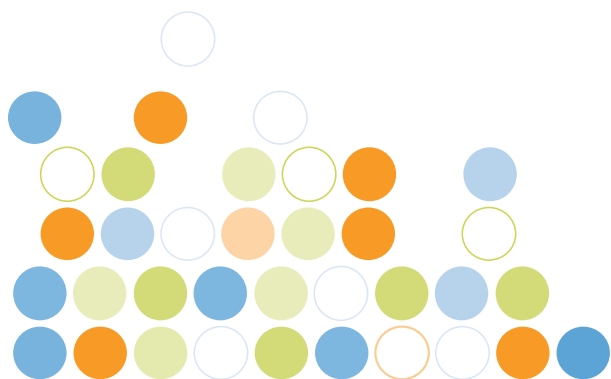
Do not ignore the early warning signs of GVHD. Early treatment of GVHD, infections and other side effects from treatment can make a big difference in your long-term recovery.

### 3. Protect yourself from the sun

Exposing yourself to the sun's ultraviolet (UV) rays increases your risk of getting GVHD. To limit your exposure to the sun:

- Avoid the sun as much as possible
- Use an umbrella when you're out in the sun
- Wear a hat, sunglasses, long sleeves and pants when you go out
- Apply SPF 30 or higher sunscreen on any skin that is not covered. You can also wear SPF clothes.

Even on a cool, cloudy day the sun is just as harmful as on a hot, bright day.



## WATCH FOR **SIGNS OF GVHD**

Because chronic GVHD can develop after you've left the hospital, it's important that you and your caregiver watch for the signs and symptoms of chronic GVHD. Not everyone experiences all of these signs, but many patients experience some of them. Some symptoms might develop into long-term problems. Others are temporary and will go away with treatment.

### **Acute GVHD**

#### **Skin**

- Very faint to severe sunburn-like rashes
- Blisters

#### **Stomach**

- Nausea that doesn't go away
- Loss of appetite
- Vomiting (throwing up)
- Feeling full after eating very little

#### **Intestines**

- Diarrhea
- Belly pain that does not go away
- Feeling bloated, or full of gas
- Blood in your stool

#### **Liver**

- Jaundice (your skin or eyes look yellow)
- Dark (tea-colored) urine
- Pain in the upper part of your belly
- Swelling in your legs or belly

### **Chronic GVHD**

#### **Skin and nails**

- Skin texture changes (thickening)
- Nail changes
- Rash
- Unusual hair loss or thinning
- Itchy skin

#### **Joints and muscles**

- Arthritis-like symptoms (pain and stiffness)
- Muscle pain, cramps or weakness

#### **Eyes**

- Dry eyes
- Irritation that doesn't go away
- Blurred vision
- Teary eyes

#### **Mouth**

- Trouble opening your mouth
- Sores
- Irritation that doesn't go away
- Chapped lips
- Pain

#### **Lungs**

- Cough that doesn't go away
- Shortness of breath
- Trouble breathing

#### **Digestive system**

- Nausea or vomiting (throwing up)
- Diarrhea
- Stomach pain or cramping

#### **Genitals**

- Irritation or dryness
- Rash
- Painful intercourse

Many of the early warning signs for GVHD could also be caused by infection or another side effect. That's why it's important to tell your doctor of any changes in your body that you see or feel.

### For **Parents**

If your child had a transplant, look for early warning signs of chronic GVHD every day. Ask your child specific questions about any changes or problems he or she may be having. Explain to your child how important it is that you know right away about any changes in their body that he or she sees or feels.

## TREATMENT FOR GVHD

Starting treatment as early as possible can lead to the best results. Steroids, like prednisone, are the main treatment for GVHD. Steroid medicines can also be called immunosuppressants. These medicines help your body accept your new donor cells so that your body doesn't recognize them as different and attack the donor cells.

Because your new immune system is weaker, you may have limitations on what you can do during treatment for GVHD, even if your transplant was more than 1 year ago. For example, you may need to avoid yard work and large crowds. Ask your transplant team what you may need to avoid.

Follow your doctor's instructions carefully when taking GVHD medicines. Do not stop taking them without letting your doctor know. If you can't take them for any reason, tell your doctor. If you can't swallow your medicines, you may need to get them through your central line (directly into your bloodstream) temporarily.

The treatment for GVHD works well for many patients. However, you may need to be treated for weeks or months. This is because it can take time to find the best type and dose of medicine with the fewest side effects to treat your GVHD.



## AT EVERY STEP, WE'RE **HERE TO HELP**

**As you journey through transplant, you're not alone. Be The Match® is ready to help.**

We offer many free programs and resources to support you, your caregivers and family members before, during and after transplant. Connect with us in the way that works best for you.

LEARN: **BeTheMatch.org/patient** EMAIL: **patientinfo@nmdp.org**

ORDER: **BeTheMatch.org/request** CALL: **1 (888) 999-6743**

Our programs and resources offer support in 11 languages, including Spanish bilingual staff, and translation is available in more than 100 languages.

VISIT: **BeTheMatch.org/translations**

## QUESTIONS TO **ASK YOUR DOCTOR**

As you prepare for your allogeneic transplant and learn more about GVHD, you may want to ask your doctor:

- What is my risk for GVHD after transplant?
- Is there anything I can do to lower my risk for GVHD?
- What signs and symptoms will I need to watch for?

## **OTHER RESOURCES TO HELP YOU LEARN MORE**

Be The Match® has a variety of free resources to help you before, during and after transplant.

Visit **BeTheMatch.org/patient-resources** and choose the resources that best meet your needs. Here are some you might find helpful:

- BOOKLET: ***Allogeneic Transplant Process***
- WEBCAST: ***Living Now: Your Role in Managing Your Chronic GVHD***



Every individual's medical situation, transplant experience and recovery is unique. You should always consult with your own transplant team or family doctor regarding your situation. This information is not intended to replace, and should not replace, a doctor's medical judgment or advice.