

## Stages of Recovery

### **Overview**

Recovery after transplant can take a year or more. Learning what to expect during the different stages of recovery can help you take charge of your health and healing.

### ***Early Recovery - Day 0 to Return Home***

#### **After your transplant**

The first 30 days after a bone marrow or cord blood transplant (also called BMT), is considered the early stage of recovery. You will most likely still be in the hospital, resting, recovering and awaiting engraftment of the donated cells you received. The focus is on infection prevention and treatment of any acute graft-versus-host disease that you might experience.

#### **Waiting for engraftment: days 0 - 30**

Over time, the donated cells you received for your transplant start to migrate to the cavities of the large bones, set up housekeeping or "engraft." Engraftment is an important milestone in your transplant recovery.

This period before engraftment is a time of especially high risk. Until your donated cells start to grow and make new blood cells, you will have low counts of all types of blood cells. This is caused by the preparative regimen you received before your transplant. It is also caused by some post-transplant drugs, such as those used to prevent graft-versus-host disease (GVHD). This means you can get an infection easily and infections during this time can be serious, even life-threatening.

#### **Preparative regimen side effects.**

In the first 30 days after your transplant, you may also have some side effects from the preparative regimen you received before your transplant. Some of these side effects can be serious, and others are less serious, but can be painful or uncomfortable.

## Transfusions and growth factors

Until your donated cells engraft, you may get red blood cell or platelet transfusions. On average, transplant patients get one red blood cell transfusion a week, and two to three platelet transfusions a week.

You may also get growth factors, drugs that help the body make more blood cells. Growth factors may help donated cells engraft more quickly. A common growth factor is granulocyte-colony stimulating factor or G-CSF (also called filgrastim or Neupogen®). G-CSF helps the body make white blood cells.

## Managing pain

Tell your transplant team if you are feeling pain. Effective pain control is important to healing. Because pain causes stress, depression and fatigue, trying to simply "tough it out" can actually slow your recovery.

If pain-relieving drugs such as ibuprofen and naproxen are not effective for you, more powerful pain-relieving drugs may be prescribed. These could include opiates such as Percocet®, Demerol®, and Vicodin®, among others.

Some people do not want to use opiates out of fear that they will become addicted. The chances of that are very small. Psychological dependence on drugs is different from the physical need to relieve pain. It is important to take medications as prescribed. Do not wait until pain gets uncomfortable or unbearable. Pain is best controlled when treated early.

### **There are three issues associated with the use of opiates:**

**Addiction** is a psychological reaction, not a physical response. Addiction is rare among people taking opiates to manage pain. Before an opiate is prescribed, your doctor will determine if you are a good candidate - with no prior history of substance abuse or other condition that would indicate risk for addiction.

**Dependency** can happen to anyone who takes an opiate for more than a few weeks. It simply means that if a person suddenly stops using the drug, they could experience physical side effects. When people are ready to stop using an opiate, they are carefully weaned off of it under a doctor's close supervision.

**Tolerance** describes a patient's need to take greater amounts of the drug to get the same benefit. Tolerance requires adjustment in the amount or type of pain medication prescribed or adding a non-opiate pain reliever.

While opiates are highly effective for pain management and beneficial to healing, their use needs to be carefully monitored. Take only as directed by a doctor who specializes in pain management. Involve family members in helping monitor use and watching for any side effects such as changes in behavior or judgment.

### **Engraftment and early recovery - Days 30-100**

After your donated cells engraft, your blood cell counts will begin to go up and your immune system will become stronger (although it will be weaker than usual for many months). Your transplant team will still care for you and watch you closely for complications. Sometime during the first 100 days, you will probably be able to leave the hospital and receive your care as an outpatient.

#### **Leaving the hospital**

If your transplant center is not near your home, you will need to arrange to stay nearby while you receive your outpatient treatment. Your transplant center or the National Marrow Donor Program's [Office of Patient Advocacy](#) (OPA) can recommend places to stay.

#### **Returning Home**

Preparing your home for your return is an important step in your recovery that your loved ones can help you with. See [Preparing your home](#) on Marrow.org for more information and be sure to check out the "Clean Environment" section in the "Protecting your Health" section under the "Infections" tab in the upper right section of this screen.

### ***Mid Recovery - Returning Home to One Year***

After you return home, you will continue to focus on preventing infection, watching for signs of graft-versus-host disease (GVHD), eating well and exercising to regain your strength. It's not unusual to be readmitted to the hospital to be checked out as a precaution or treated for complications that you might experience.

Your first year post-transplant is a time of adjustment to all the changes in your life. It can help to establish and keep a familiar routine to help you take precautions and follow guidelines. It's important to continue to follow your guidelines from your transplant team and not let your guard down.

If you are a caregiver, you may find that you are taking on even greater responsibility during the first year. This can include managing medications, arranging doctor visits, helping to enforce precautions and being on the lookout for warning signs of GVHD and other complications.

It is important for caregivers to get the support they need. See the "Caregiving" tab at [www.marrow.org/PATIENT/Survivorship\\_Ed/](http://www.marrow.org/PATIENT/Survivorship_Ed/).

Recovery can be a lengthy process, but there is a lot you can do to promote your healing.

### ***Long-term Recovery - One Year +***

After a bone marrow or cord blood transplant, your recovery will take many months. By one year after transplant, many transplant survivors are able to take part in their usual activities, such as work or school. Most say they have a good quality of life, maybe even better than before their transplant. They say they have a greater appreciation for the good things in life and find joy in each day.

On the other hand, most survivors have some long-term effects or complications from their transplant. Some of these go away over time. Others are permanent. Some are fairly easy to manage, but other long-term effects are serious or painful. You cannot control whether you will have these long-term effects, but you can take steps to deal with them.

Your treatment and recovery can also affect your emotional health and relationships. It is important to be aware of changes and get the support that you and your family need.

You can also view presentations about managing many of these effects from our survivor's conference at [www.marrow.org/PATIENT/Support\\_Resources/](http://www.marrow.org/PATIENT/Support_Resources/).