

Oral Care Instructions for People Undergoing Bone Marrow Transplant

After learning that you have a medical condition that may require treatment with a bone marrow transplant, your medical team may refer you to a dentist or recommend that you are evaluated by your dentist before you receive your bone marrow transplant when possible. Your medical condition, medications taken prior to bone marrow transplantation, and bone marrow transplantation may all strongly impact your oral health. This handout may help you prepare to best take care of your mouth before, during, and after bone marrow transplantation.

What changes may I expect to my oral health?

During the bone marrow transplantation treatment you will receive chemotherapy and medications that lower your immune system's ability to fight infection. These medications may increase your risk for infections in your mouth including gum disease, tooth decay, and/or tooth abscesses. Infections may lead to pain and/or bacteremia (bacteria in the blood) which can become a very serious medical concern. It is important to try to prevent or eliminate dental infection, especially before and while your body is less able to fight infections.

A bone marrow transplant can also affect your salivary glands which make saliva. This results in a decrease in saliva flow ("xerostomia") and sensation of dry mouth, which can be uncomfortable and increases the risk for tooth decay.

What can I do before my BMT?

1. Make an appointment for a dental evaluation **as soon as possible** after receiving a diagnosis requiring bone marrow transplant. This will allow your dentist to identify problems and treat them before blood counts drop.

Even if you already have lower blood counts, it is important to have this evaluation. Radiographs of the mouth and a clinical examination can usually be done without causing any bleeding or trauma. If the dentist finds a dental problem that requires attention, they should contact the medical oncologist and coordinate any dental care, including cleaning of teeth, at a time when the blood counts are at an acceptable level.

2. Try to get a professional dental cleaning 1-2 weeks prior to being admitted to the hospital for the bone marrow transplant if possible (ie blood counts are appropriate).

How should I care for mouth and teeth during the BMT?

It is extremely important to keep the mouth clean and healthy during the bone marrow transplant process to help reduce the risk of infection and bleeding. Problems, including mouth sores, are often less severe in patients with excellent oral hygiene. Here are some suggestions for reducing oral complications during the transplant.

- **Medications:** Your medical oncologist may prescribe you and antiviral and/or antifungal medications which lower the risk of viral and fungal (thrush) infections in the mouth as well as in other areas of the body. Fewer infections in the mouth result in less pain and better nutrition.
- **Toothbrushing:** Brush your teeth at least twice daily with a soft or supersoft toothbrush. Brush in a gentle, circular motion to avoid trauma to the gums which may cause bleeding. Always disinfect the toothbrush before each use and change toothbrush often (consider weekly).
- **Toothpaste:** Strongly flavored toothpaste may become irritating. Try a children's toothpaste or toothpaste made for individuals with dry mouth which may be less irritating.
- **Flossing:** When platelet counts are low (below 50,000), your health care provider may advise you to refrain from using floss.
 - If you use a water-irrigating device, be sure to let your dentist and medical provider know. Put on a very low setting to avoid trauma to the gums.

- **Mouthwash:** Some people with gum disease may be asked to rinse with a mouth rinse containing 0.12% chlorhexidine. It is best to use the mouth rinse 2-3 times daily after meals and at bedtime. This medication may stain your teeth. This staining is temporary and is able to be removed during professional cleanings.

What should I do if I develop oral sores?

Mouth sores (mucositis) may occur during and right after bone marrow transplant. Combined with the dryness, your mouth can become quite uncomfortable.

If you develop mouth sores, do the following:

1. Rinse with salt water and baking soda rinses. The rinse moistens the mouth, breaks up thick saliva, and may help buffer against the acids.
 - Mix 1/4 tsp. salt and 1/4 tsp baking soda in a cup of water and rinse. Do this as often as you wish. If the salt irritates your mouth, you may omit the salt and use ½ tsp baking soda in 1 cup water.
2. If you wear dentures, leave them out until the mouth heals. Disinfect all full dentures and partial dentures before each use with soap or a rinse containing chlorhexidine. Dentures without metal may be soaked daily in a fresh solution of Clorox and water (1 tbs. Clorox to 1/2 cup of water). Rinse the dentures well before placing them back in the mouth.
3. If you need additional pain control your doctor may consider prescriptions including viscous lidocaine or magic mouthwash. Use caution while eating when using medications that numb the mouth as they may increase the risk of choking.

How should I care for mouth and teeth after the BMT?

What can I do to alleviate dry mouth?

- Drink plenty of water and use salt and baking soda rinse as described above
- Try over-the-counter mouth rinses or gels made for dry mouth. Many

options are available in local grocery stores, pharmacies, or online.

- If you use mouthwash, make sure that it does not contain alcohol
- Consider using fluoride containing toothpastes made for people with dry mouth. Avoid toothpastes with whitening agents or a lot of added ingredients that may irritate your gums.
- Use water-based lip moisturizer
- Humidify your home

What can I do to decrease the risk of tooth decay?

Changes in your saliva consistency and dry mouth after BMT may increase your risk for tooth decay (cavities). In order to prevent decay, we recommend the following oral hygiene routine and diet modifications:

1. If blood count is appropriate, including a platelet count greater than 50,000, brush teeth with a soft-bristled toothbrush and floss daily.
2. Your dentist or medical provider may prescribe a toothpaste with higher fluoride concentration depending on your risk for tooth decay. If you get a prescription, use it as directed. Use over-the-counter or your prescription-strength fluoride-containing toothpaste every night using the “Brush-on” technique:
 - a. Place a pearl-sized portion of fluoride toothpaste on your toothbrush.
 - b. Brush on all surfaces of your teeth for two minutes. Try to use your brush to squeeze the fluoride in between your teeth.
 - c. Spit out the excess. Don’t eat, drink, or rinse for ½ of an hour (30 minutes).

Please note: Your saliva quantity may not return to normal levels even years after bone marrow transplant. For this reason, you need to use fluoride for the **rest of your life**.

3. Continue regular dental visits every 4 to 6 months. It is important to detect cavities early so that they can be filled when small, and to evaluate your prevention technique. You can still receive care from your family dentist even though you’ve had a bone marrow transplant. If your dentist has any

questions or concerns, please ask them to call us for advice.

- If you have an indwelling catheter, it may be necessary to take a dose of antibiotics one hour prior to any dental procedure that may cause bleeding. Speak with your medical oncologist and dentist to determine if you need this prescription.

4. Diet modifications: Cavities are caused when bacteria eat sugars from your diet. Reduce or eliminate your intake of high-sugar foods and drinks such as Coca- Cola, candy, etc. in order to help prevent decay.

You play the most crucial role in preventing dental problems. Sticking to a preventive regimen as described above, plus regular recall visits to your dentist are key. Please let us know how we may best support you in keeping your mouth healthy!

What is the contact information?

Hospital Dentistry: (734) 936-5950

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