

Life After BMT

Updates from the Blood or Marrow Transplant Survivor Study

BMTSS Progress

UAB INSTITUTE FOR CANCER
OUTCOMES & SURVIVORSHIP
The University of Alabama at Birmingham

We hope this winter 2020 newsletter finds you well and that you and your families are staying safe and healthy. BMTSS is the Blood or Marrow Transplant Survivor Study. The BMTSS is currently ongoing at the University of Minnesota, the University of Alabama at Birmingham, and City of Hope. You are receiving this newsletter because you are a BMTSS participant. In this newsletter, we will provide information on two topics (1) coronavirus (COVID-19) and (2) transplant-related heart problems. As a reminder, all of our older newsletters are available on our website:

<https://www.uab.edu/medicine/icos/icos-research/bmt-study>.

This newsletter will give you an update on the study's progress and let you know how your information is helping us to make further progress in understanding life after BMT. We do not require any action in response to this newsletter unless you have moved or changed your phone number. **We encourage you to update your contact information by sending us an email at BMTStudy@peds.uab.edu or calling us at 855-903-2136.**

[Winter 2020]

For More Information:

Call:
855-903-2136

Mail:
Blood or Marrow Transplant Long-
Term Follow-Up Study
1600 7th Ave South
Lowder 500
Birmingham, AL 35233

Email:
BMTStudy@peds.uab.edu

Recent BMTSS Publications

Published in the *Journal of Clinical Oncology* in July 2020, "**Total Body Irradiation and Risk of Breast Cancer After Blood or Marrow Transplantation: A Blood or Marrow Transplantation Survivor Study Report**" looks at breast cancer risk after BMT in patients who received total body irradiation (TBI). Since early detection is important in improving breast cancer outcomes, the ability to personalize breast cancer screening recommendations for BMT survivors could improve outcomes. Our study found that the 10-year probability of developing breast cancer among those who received TBI was 2.7% by age 60 and 5.2% by age 70. Compared to the general population, the risk of breast cancer in BMT recipients was 4.5-times higher in women who received TBI before they reached age 30. This risk was also higher among autologous BMT recipients who received certain types of chemotherapy (alkylating agents and anthracyclines) prior to their BMT. Based on these findings, the decision about when BMT recipients should begin screening for breast cancer should take into consideration the age when they received TBI, and their pre-BMT treatment regimen.

For more information: Total Body Irradiation and Risk of Breast Cancer After Blood or Marrow Transplantation: A Blood or Marrow Transplantation Survivor Study Report. Andrew M. McDonald, Yanjun Chen, Jessica Wu, Lindsey Hageman, ... Smita Bhatia. *Journal of Clinical Oncology* . 2020 38:25, 2872-2882.

Ask the Researchers

We received several great questions since our last newsletter. Here we share some answers with you. Please send your questions to the BMTSS Study Staff by emailing BMTStudy@peds.uab.edu.

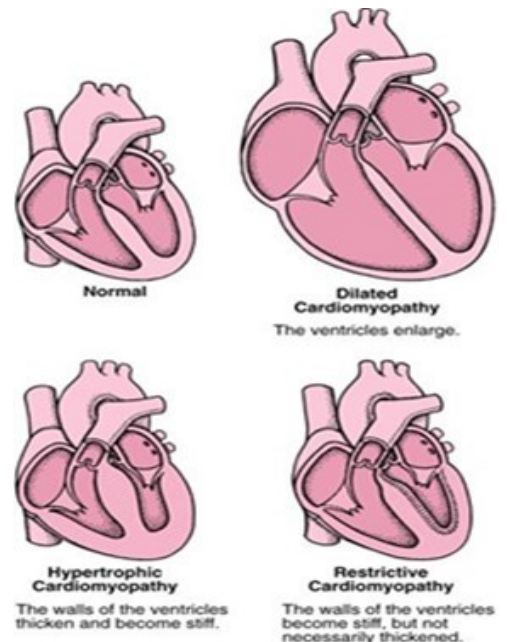
Question: How did the blood or marrow transplant affect my heart ?

As survival rates improve, we are learning more about the long-term effects of treatment. One such long-term effect is cardiotoxicity (heart damage), which may occur when the heart muscle is exposed to a high dose of anthracycline chemotherapy with or without radiation. Cardiotoxicity can develop during cancer treatment and can occur days, months, or years after cancer treatment. You may be at increased risk for cardiotoxicity if you received radiation therapy and chemotherapy that can affect the heart, or have risk factors for heart disease, such as obesity, diabetes, high blood pressure or high levels of LDL "bad" cholesterol.

Some problems that may develop as a result of chemotherapy and radiation include:

- Pericarditis (inflammation of the tissue surrounding the heart)
- Premature coronary artery disease and atherosclerosis (buildup of fat in the arteries)
- Myocarditis (inflammation of the heart muscle)
- Congestive heart failure (reduced heart pumping ability)
- Heart valve disease (leaky or stiff heart valves)
- Arrhythmias (heart rhythm changes, caused by damage to the heart's electrical system)
- Cardiomyopathy (disorder of the heart muscle)

In this newsletter, we will discuss cardiomyopathy, which refers to physical changes in the heart muscle so it is not able to pump blood to the rest of the body normally. There are three types of cardiomyopathy - the types are based on the physical changes that occur in the heart. **Dilated cardiomyopathy** occurs when the heart muscle stretches and becomes thin, causing the pumping chambers to enlarge, and making it difficult for the heart to pump. **Hypertrophic cardiomyopathy** occurs when the heart muscle becomes abnormally thick, which makes it hard for the heart to pump. **Restrictive cardiomyopathy** occurs when scar tissue replaces normal heart muscle tissue, causing the heart to become stiff, and making it difficult for the heart to pump.





Reduce your Risk of Cardiomyopathy:

- If you are a smoker, try to quit
- Be as physically active as you can
- Follow a healthy diet with reduced salt
- Get 7 to 8 hours of sleep every night
- Avoid drinking alcohol, smoking or using recreational drugs
- Keep your blood pressure, cholesterol, and blood sugar under control
- Avoid processed foods, such as canned soups, frozen meals, and cold cuts
- Reduce your stress levels. Some ways to do this include meditation or deep breathing exercises

Call your doctor if you are experiencing shortness of breath, leg swelling, heart palpitations, or chest pain.

Symptoms of Cardiomyopathy:

- Sudden weight gain
- Bloating in your abdomen (belly)
- Feeling dizzy, weak or lightheaded
- Swelling in your legs, ankles, or feet
- Feeling more tired or weak than usual
- Trouble breathing whether you are active or resting
- Coughing, which may be worse when lying down at night
- Heart palpitations, which may feel like a fluttering or pounding feeling in your chest

If you believe you have heart problems, speak with a cardiologist who understands the relationship between cancer treatment and the heart.

Preventive Health

COVID-19 is a new and highly contagious virus that has affected many people all over the world. As a BMT survivor, you may be wondering about how the virus might affect you and your health. We have summarized some information for you here. However, new information is always emerging about this virus, and it is a good idea for you to keep up with current information from resources such as the Centers for Disease Control and Prevention (CDC).

(<https://www.cdc.gov/coronavirus/2019-ncov/index.html>)

COVID-19 is a viral illness transmitted primarily by respiratory droplets. BMT survivors need to be aware of ways to protect themselves from COVID-19. These same steps can also be helpful in protecting against the flu.

What to do if you or someone in your home has been exposed to COVID-19:

Stay at home and call your Primary Care Provider

Monitor yourself for a fever, cough, loss of taste or smell, shortness of breath

Signs of medical distress needing emergency attention:

- Pressure and/or pain in the chest
- New onset of confusion
- Lips turning a bluish color

Use the CDC symptom checker:

<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/>



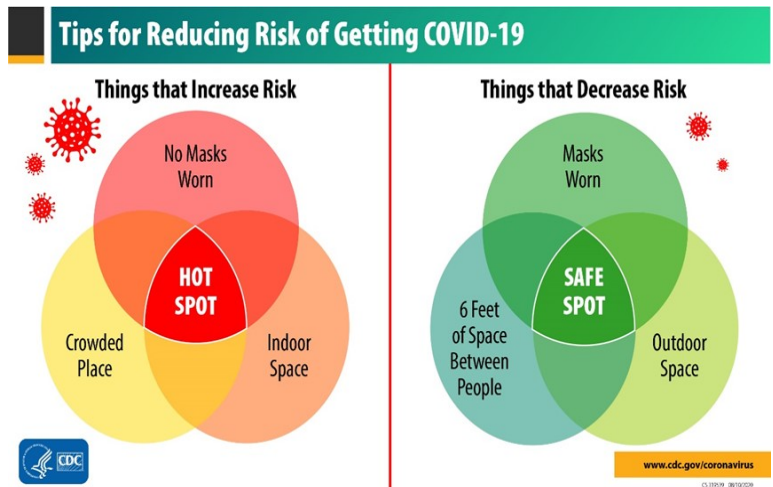
Preventive Health Continued

Continue Practicing:

- **Social distancing:** Limit your time in public and stay 6 feet away from people when you are outside the home. In general, the more closely you interact with others and the longer that interaction occurs, the higher the risk of COVID-19. If possible, avoid traveling during the current pandemic.
- **Face mask:** Wear a mask when you are outside the home. Wash your hands or use hand sanitizer before putting on your mask. Be sure to cover your nose and mouth with the mask. Use a disposable mask or, if wearing a cloth mask, wash your face mask after use.
- **Personal care:** Wash your hands with soap and water for at least 20 seconds, once an hour (even at home). If soap is not available, you can use a hand sanitizer that contains at least 60% alcohol. When possible, avoid sharing items with other members of your household.
- **Exercise:** Moving around for at least 30 minutes a day can help your overall physical and mental health. You can find what type of exercise works for you by exploring free online tutorials from the comfort of your home.
- **Prescriptions:** Have at least 30 days of medications as an emergency supply. If you have not done so already, look into setting up home delivery for your prescriptions.
- **Healthcare:** Keep in touch with your Primary Care Provider (PCP) if you have any questions and/or concerns. Inquire about setting up telemedicine appointments. Do not change any part of your treatment plan without talking to your provider

If you are outside the home, activities are safer if:

- You can maintain at least 6 feet of space between you and others. COVID-19 spreads easier between people who are within 6 feet of each other.
- They are held in outdoor spaces. Indoor spaces with less ventilation where it might be harder to keep people apart are more risky.
- People are wearing masks. Interacting without wearing masks also increases your risk



Additional Resources:

American Cancer Society: <https://www.cancer.org/latest-news/common-questions-about-the-new-coronavirus-outbreak.html>

Support groups:

https://www.cancercare.org/support_groups/179-stem_cell_bone_marrow_transplant_caregiver_support_group

<https://bethematch.org/patients-and-families/support-for-you-and-your-family/group-support/>

<https://www.cancersupportcommunity.org/coronavirus>

Financial resources:

<https://www.cancerandcareers.org/en>

<https://www.cancer.net/navigating-cancer-care/financial-considerations/covid-19-financial-resources-people-with->