



# Late Effects of Bone Marrow Transplant From Head to Toe

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Survive&Thrive  
SYMPOSIUM

## Eyes

Long Term Complications	Risk Factors	What Can I Do?
<ul style="list-style-type: none"><li>• Cataracts</li><li>• Microvascular retinopathy</li><li>• Sicca syndrome (Dry Eyes)</li></ul>	<ul style="list-style-type: none"><li>• Total Body Radiation</li><li>• GVHD</li><li>• High Dose Steroids</li></ul>	<ul style="list-style-type: none"><li>• Ophthalmologic evaluation for changes in vision</li><li>• Have risk factors? Consider yearly eye exams with an ophthalmologist</li></ul>

## Oral Cavity

Long Term Complications	Risk Factors	What Can I Do?
<ul style="list-style-type: none"><li>• Dental Caries</li><li>• Periodontal disease</li><li>• Sicca syndrome (Dry Mouth)</li><li>• Oral Cancer</li></ul>	<ul style="list-style-type: none"><li>• GVHD</li><li>• High dose radiation to the head or neck</li></ul>	<ul style="list-style-type: none"><li>• Routine dental exams and cleaning***</li><li>• Screening for oral cancer</li></ul>

\*\*\*Ask your physician if it is safe to begin dental exams, and whether you need preventative antibiotics prior to dental procedures.

## Lungs

Long Term Complications	Risk Factors	What Can I Do?
Non-infectious pneumonia	<ul style="list-style-type: none"><li>• Certain types of chemotherapy</li><li>• Radiation</li><li>• GVHD</li></ul>	<ul style="list-style-type: none"><li>• Report new symptoms</li><li>• Don't smoke!</li></ul>

## Reproductive Organs

Long Term Complications	Risk Factors	What Can I Do?
Infertility	Chemotherapy Radiation	Test female hormones or sperm count



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## Heart

Long Term Complications	Risk Factors	What Can I Do?
<ul style="list-style-type: none"> <li>• Congestive heart failure</li> <li>• Coronary artery disease</li> </ul>	<ul style="list-style-type: none"> <li>• Anthracycline chemotherapy</li> <li>• High dose radiation to the chest</li> </ul>	<ul style="list-style-type: none"> <li>• Report new symptoms</li> <li>• Reduce preventable risk factors for heart disease</li> </ul>

1. Eat right
  2. Maintain a healthy weight
  3. Stay active
  4. Don't smoke
  5. Get screened and treat when needed:
    1. High blood pressure
    2. High cholesterol
    3. Diabetes

## Bones

Long Term Complications	Risk Factors	What Can I Do?
<ul style="list-style-type: none"> <li>• Osteopenia</li> <li>• Osteoporosis</li> </ul>	<ul style="list-style-type: none"> <li>• Adult women</li> <li>• Allogeneic &gt; Autologous</li> <li>• High dose Steroids</li> </ul>	<ul style="list-style-type: none"> <li>• DEXA (bone density scan) at 1 year post transplant; repeat in 1-2 years as needed</li> <li>• Weight bearing exercise</li> <li>• Calcium +Vitamin D</li> </ul>
<ul style="list-style-type: none"> <li>• Avascular necrosis (shoulders or hips)</li> </ul>	<ul style="list-style-type: none"> <li>• High dose Steroids</li> </ul>	<ul style="list-style-type: none"> <li>• Tell your physician about any new joint pain</li> <li>• Reduce steroid dose as quickly as able</li> </ul>

## Skin

Long Term Complications	Risk Factors	What Can I Do?
<ul style="list-style-type: none"> <li>• Skin Cancers</li> </ul>	<ul style="list-style-type: none"> <li>• Immunosuppressive medication</li> <li>• Sun exposure</li> </ul>	<ul style="list-style-type: none"> <li>• Wear sunscreen and/or hats and long sleeves</li> <li>• At higher risk? Yearly skin exams with a dermatologist</li> </ul>

Reference: Majhail NS, Rizzo JD, Lee SJ, et al. Recommended screening and preventive practices for long-term survivors after hematopoietic cell transplantation. *Biol Blood Marrow Transplant*, 2012; 18(3): 348-371.