Rehabilitation During Hematopoietic Cell Transplant (HCT)

Physical & Occupational Therapy
What We Will Cover

- What is HCT?
- The rehabilitation therapy team
- Benefits of physical therapy
- Risks of inactivity
- Exercise while in the BMT unit
  - Assessment
  - Exercise plan
  - Aerobic exercise
  - Strength exercise
- Exercise after you leave the hospital
  - Take-home program
  - POWER program
  - More physical therapy, if needed
What is HCT?

- HCT stands for hematopoietic cell transplant.
  - Hematopoietic cells are blood-forming cells in the bone marrow.
- HCT is a treatment for cancers of the blood and other blood diseases.
  - It is often called stem cell transplant.
The Rehabilitation Therapy Team

- **Physical therapists** (PTs) help you improve movement and ease of activity through exercise. Exercise can also help you manage pain.

- **Occupational therapists** work with you to find ways to maintain daily life activities, or explore new ones, during and after the HCT. They also help you plan how you will manage activities after you go home.

- **Massage therapists** use various bodywork methods to help ease pain and improve your well-being.
Benefits of Physical Activity

- Staying active keeps you able to do things needed for daily life.
  - Standing
  - Walking
- It helps you keep your balance and your strength.
- Being active can help you recover in many ways:
  - Prevents complications
  - Eases fatigue
  - Improves sleep
  - Puts you in a better mood
Risks of Not Being Active

- Your muscles get weaker each day you stay in bed.
  - This is called **atrophy**.
  - You can lose 3–10% of your strength each day.

- It can take months or years to recover from this weakness.

- Muscle atrophy makes simple, everyday activities hard to do.
  - Walking
  - Showering
  - Using the toilet
Your Occupational Therapist Helps You

- Set personal goals and plan a daily hospital routine
- Plan how to get back to daily life activities after transplant
- Keep up your strength and energy levels to do the things you want to do
- Learn how to deal with stress and stay motivated
- Find ways to manage memory and thinking problems
- Learn how to save your energy and do more in your daily life
- Decide if you need equipment so you can do things safely
Knowing Where to Start

- Your everyday level of strength and fitness is called the **mobility baseline**. The physical therapy team uses it as a starting point for your exercise plan.

- We use a special form called the Activity Measure for Post-Acute Care™ (AM-PAC™) to help us know your strength and fitness level. Your therapist will give you the form at each visit. An interpreter or family member can help you fill it out.

- The physical therapy team will check your strength and fitness each time you meet.
Your Exercise Plan

- Your physical therapist will work with you to design an exercise plan.
- The plan will include aerobic, strength, and stretching exercises.
  - Aerobic exercise helps keep your heart and lungs working right.
  - Strength exercise helps keep your muscles from weakening.
  - Stretching helps keep you able to move easily.
Aerobic Exercise

- Your aerobic exercise may include walking, riding a stationary bike, or step exercises.
  
  - You need your physical therapist's OK before you use the bike in your room.

- We recommend you do 5-10 minutes of aerobic exercise 3-5 times daily.

- During your sessions, your physical therapist will check your heart rate, blood pressure, and oxygen level to make sure you are tolerating exercise well.

  Keep your workout at a light to moderate level of effort.
Strength Exercise

- Your routine will include exercises for your arms, legs, and core.

- Do strength exercises at least once a day. Repeat each exercise 10–15 times.
Do NOT Exercise When...

- The activity causes pain.
- You are extremely tired.
- Your heartbeat, breathing, or blood pressure are not stable.
- Your levels of white and red blood cells are too low. Your BMT care team will tell you if this happens.
- You are dizzy.
When You Leave the Hospital

- Your physical therapist will give you exercises to do at home every day.
- Your occupational therapy team will help you plan your transition back into daily life with activities you can do after HCT.
- You may need more physical therapy after you leave the hospital.
- You can work out with the cancer exercise specialists at the POWER fitness program.

For more information about the POWER program, call 801-587-4585.
In Summary

- Your rehabilitation team helps you stay strong and active during and after your transplant.
- Being active can help you recover more quickly.
- Your physical therapy team will help you exercise while you are in the hospital. They will also give you exercise recommendations for after you go home.
- Your occupational therapy team will help you plan how to transition back into your daily life routines and roles. They will also help you identify activities you can do after HCT.
- You can also take part in the Wellness Center’s POWER fitness program.
Please talk to your physical and occupational therapy team if you have any questions or concerns.