Brittle Bones from Hormone Therapy

**Hormone treatments for prostate cancer can lead to thin, brittle bones.**

The medical term for this is osteoporosis (say: os tee oh por OH sis). This condition is fairly common as people age. But, hormone treatments can increase the chances of it occurring. The danger is that thin, brittle bones break easily. So, it’s important to take action to prevent or limit the effects of osteoporosis.

**What can I do?**

1. **Talk with your healthcare team**
   - Ask about your chances of getting osteoporosis. Your doctor or nurse may suggest that you get a painless test called a bone mineral density (BMD) test. It’s fast and easy, and shows whether your bones are getting thin and fragile.

2. **Lower your chances of falling**
   - Falls are the #1 reason for broken bones in older adults.
   - Wear sturdy, well-fitting shoes for extra support.
   - If you live in a cold climate, be careful walking on ice and snow. Put ice grippers on your boots and have someone walk with you.
   - In your home:
     - Remove loose rugs and clutter on the floor.
     - Have a rail installed in your bathtub for extra support
     - Hold onto stair rails when you go up and down stairs.
     - When you get up at night, turn on the lights!

3. **Adopt health habits that help prevent osteoporosis**
   - Increase weight-bearing exercise such as walking, dancing, lifting weights, or using a training machine. These exercises help to slow bone loss. Talk with your doctor or nurse before starting a new exercise program.
   - Don’t smoke and limit your alcohol consumption. People who smoke and drink excessive alcohol have a higher risk of osteoporosis.
   - Avoid cola and soft drinks and limit caffeine. These may lower bone strength.

How does hormone therapy cause brittle bones?

Hormone therapy, used to treat prostate cancer, works by lowering or blocking testosterone. Since testosterone helps keep bones strong, men using hormone therapy for their cancer may develop thin, brittle bones. Brittle bones can lead to broken bones. If you’re using hormones for cancer therapy, take action!
Brittle Bones from Hormone Therapy

4. **Eat more calcium rich foods and ask if you need a calcium tablet**
   Calcium is a mineral needed for strong bones. It’s common in the foods listed below, but most adults don’t get enough calcium just from food. Ask your doctor or nurse how much calcium you need each day and whether you need to take a calcium tablet. Ask what kind to take and whether you need a tablet that includes Vitamin D. Vitamin D helps the body absorb calcium.

Foods that contain calcium:
- Milk and milk products such as yogurt and cheese
- Beans
- Salmon
- Almonds and sesame seeds
- Certain fruits and vegetables such as oranges, figs, collard greens, spinach, rutabaga, broccoli, and kale
- Some drinks with added calcium such as orange juice and soy milk

5. **Other factors to avoid that may increase your risk for osteoporosis**
   - Medications to reduce stomach acid for heartburn or reflux may reduce calcium absorption. If you need these medications, you should talk to your doctor about your calcium supplementation.
   - Vitamin D deficiency can increase your risk for osteoporosis. Especially if you live in a northern climate, you should talk to your doctor about checking your Vitamin D level.
   - Steroids like prednisone can increase your risk for osteoporosis. Talk to your doctor about this medication if you need it for another condition.

6. **Educate yourself on osteoporosis.** If your doctor prescribes medication to treat osteoporosis, be sure to follow directions. Common medicines to treat osteoporosis include these brand names:
   - Fosamax (pill once a week)
   - Reclast (IV once a year)
   - Prolia (shot twice a year)
Brittle Bones from Hormone Therapy

While these medications can improve bone health and reduce your risk of a fracture, uncommon side effects of these drugs include low calcium levels, muscle/joint aches, and jaw problems.

- Make sure you tell your doctor if you have dental problems before starting one of these medications.
- Make sure you take your daily calcium and Vitamin D as prescribed.

What questions should I ask my doctor or nurse?

Ask these questions:
- Do I need a bone density test?
- Should I do any exercises to help my bones?
- Do I need to take calcium tablets or other medicines for my bones?

If you have bone pain or break a bone, get medical help!

This information was developed under guidance of the Michigan Cancer Consortium Prostate Cancer Action Committee. Their efforts were supported in part by funding from the Centers for Disease Control and Prevention (CDC) Cooperative Agreement 5NU58DP003921. The contents of the publication do not necessarily represent the official views of the CDC.

This guide contains general information and is not meant to replace consultation with your doctor or nurse.

Revised September 2016