
What You Should Know About Steroids and Osteoporosis

What are steroid medications?

- Steroids - corticosteroids, prednisone and cortisone -- are usually taken by the mouth or through an inhaler. Steroids are used to treat many conditions, such as: asthma, rheumatoid arthritis, lupus, inflammatory bowel diseases, and multiple sclerosis.
- Follow your health care provider's recommendations on steroid use because they can harm your bones.

What effects do steroids have on bone?

- Steroids have major effects on how the body uses calcium and vitamin D to build bones. Steroids can lead to bone loss, osteoporosis, and broken bones.
- When steroid medications are used in high doses, bone loss can happen rapidly.
- Not all people who take steroid medications lose bone or lose bone at the same rate. The dose, the underlying diseases, and possibly genes all play a part. For example, postmenopausal women who take steroids for longer than six months have the greatest risk of bone loss.

How quickly can bone loss occur when taking a steroids?

- Bone loss occurs most rapidly in the first 6 months after starting oral steroids.
- After 12 months of chronic steroid use, there is a slower loss of bone.
- Inhaled steroids are less likely to cause bone loss than steroids taken by mouth. However, in higher doses, inhaled steroids may also cause bone loss.
- Steroids used for only a few days or applied to the skin are not associated with bone loss. The major impact of steroids on bone is fractures (broken bones) that occur commonly in the spine and ribs.

How does taking steroids impact the risk for a fracture (broken bones)?

- Steroid doses taken by mouth equal to or more than 5mg of prednisone daily taken for more than 3 months are considered a risk for fracture.
- Fracture risk increases as the daily doses of steroids increase. Almost one in three postmenopausal women who routinely take steroids will have a spine fracture. A person on steroids is more than twice as likely to have a spine fracture compared to a person not taking steroids.
- Your health care provider determines when you should stop taking your steroids. Once the medication is stopped, it is expected that your fracture risk will lessen. Don't change the way you take your medication until you speak to your health care provider.

Are there medications to protect bone during steroid therapy?

- The U.S. Food and Drug Administration (FDA) approves medications to prevent bone loss and reduce the risk of fractures related to osteoporosis for those who regularly take steroid medications and for long periods of time. Talk to your health care provider to find which medication is appropriate for you.
- Prevention and treatment also include:
 - Eat a varied, nutrient-rich diet that includes plenty of fruits and vegetables.
 - Choose foods to get the calcium you need and talk to your health care provider about adding a supplement only if necessary.
 - Get the recommended amount of vitamin D. This often requires taking a supplement.
 - Be physically active every day. These activities are good for you: walking, recreational sports, and dancing.
 - Do not smoke. Quit if you do.
 - Limit drinking alcohol.
 - Improve your strength and balance to prevent falls.
 - Make your home safe from falls. Remove scatter rugs and use grip bars in the shower.

If you are regularly taking steroids, these lifestyle changes are often not enough. Medication may be needed to stop bone loss or prevent fractures. Your health care provider will help you decide whether you need an osteoporosis medication. The decision will depend upon results of your BMD test and personal risk factor assessment. It is often recommended that you get a BMD test before taking steroids for longer than three months.

Questions?

Visit New York State's Osteoporosis Prevention & Education Program (NYSOPEP) website at www.nysopep.org to learn about risk factors.