Steroids + Bone Loss = Osteoporosis (Prevention Starts Now) Transcript

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Introduction to Steroid-Induced Bone Loss

If you have been prescribed steroids, your bones might be silently getting weaker. Steroids are one of the common causes of bone weakness or osteoporosis.

In our video today, I'll tell you how steroids cause bone weaknesses and how to prevent those bone loss. Hello all of you Rheumatoid Arthritis Warrior, this is Dr.

Anil Subedee, your rheumated arthritis coach at The Room Doc, as well as a practicing rheumeatologist here at Empower Artheitis and Rhematology Center.

Today, we are going to talk about an important topic, the steroid-induced bone weakness. and we'll talk about how to understand this and how The first question that you might ask is why steroid affects your bones and why I call this a silent killer.

Glucocorticoid or steroids in general are a common cause to cause bone loss and we call that glucocortecoid induced bone-loss. It's a sudden risk because of the fact that, you may not have any symptoms.

If you are having a bone lost, You may get any pain until you get a fracture. and nobody wants to have a fracture.

Why Steroids Weaken Bones

That's why it's very important to preemptively understand the risk and prevent the fractures in your bones. In particular, patients who have rheumatoid arthritis, which all of you might be suffering from, it further increases your risk of bone loss and osteoporosis.

As a matter of fact, Rheumatoid arthritis patients are at increased risk, almost twice as likely to have osteoporosis, and that's because of inflammation in your body, which is a common risk factor for osteo porosis.

So for those who have RA, it's much more important to prevent your bone loss when you are taking the steroids. and understanding this risk that the risk of osteoporosis due to steroid can be helpful for you to be proactive to minimize that risk so that none of you will have any fractures in the future while you are taking steroids.

And one key factor or one fact that you need to understand is most of the bone loss due the steroids happen in first three to six months after starting taking steroides.

Ideally, none if you're a warrior need steroids that long. But if you are taking steroids for that long for a different reason or any other autoimmune disease, you have to be careful.

Your first three to six months is the highest risk period for having osteoporosis and ball loss. So many of you might be wondering what is osteoperosis?

Osteoporosis is basically a weakness in your bone. Bone is a very living structure that is constantly being rebuilt. If you look at the picture, focus on the left side and that's your normal healthy bone, you can think of the bone like a honeycomb.

The honeycombs have thick walls. that thick walls support your bone. And this is what happened in osteoporosis. If you can see on the picture on right side, you see the honeycomb walls are thinner and the thinner wall does not support the bone as a normal healthy bone and that increases your risk of fractures.

So corticosteroid is a silent thief.

How Steroids Affect Bone Remodeling

It's basically chew up your bone causing the weakness and you may not feel any pain in the beginning but the pain happen if you have a fracture and because of the weaknesses you might be at risk of having fragility fracture which basically means even with a simple trauma you can have fractures.

Even simple activities like bending or coughing can also cause fracture. which is not normal and steroids might be contributing to that fragility fracture.

Now the next question, how does steroid impact your bone health or bone density? As we discussed just earlier, your bones are a very active tissue. There is build up a bone happening we call formation of the bone and there's a particular cell in our bone called osteoblast.

It is a cell that is involved in helping build-up the bones. And there is also the resorption happening in your bone. The cell typically involved is called Osteoclast So there's a fine balance between bone formation and bone destruction by these two cells, the osteoclast and the osteoblast.

You can think of osteoblast as a builder. So if you think up your home, then osteo blast is what is building your own. And if we think about osteoplast, those are the ones that are doing the reconstruction of your bone.

Osteoclastic help tear down the bone and there is a balance in osteocrats and osteoglasts. So when you are taking steroids, you have more activity of the osteoclast causing the destruction and less activity, of osteoblasts minimizing or decreasing the building of bones.

That's why you're more destruction, less construction. And this imbalance between the osteoblasts and osteoclast happened very early. As I mentioned earlier, it happened in the first three to six months after starting the prednisol.

That's why this is a very critical period to protect your bones. And when we talk about For protecting your bone, there are four important pillars for bone protection.

Core Bone Protection Strategies

1. Adequate calcium intake. 2. Taking vitamin D supplement while you are taking steroids. 3. Weight-bearing exercises that help build your bones. 4. Lifestyle changes that includes avoiding smoking and limiting alcohol.

Calcium, Vitamin D, Weight bearing exercise and lifestyle changes. Calcium and vitamin D are two important essential elements in helping build your bones.

They are the foundation of your bone health. Calium is typically required in different doses, but 1200 mg per day is a usual recommended dose. Depending on your health conditions and depending on the intake of calcium, you are requiring mitesates.

So please ask your doctor, your primary care doctor or your rheumatologist to get an idea on how much calcium do you need to take. And the reason is sometimes taking extra calcium might include your other risks such as stones and even there's a slightly higher risk of having heart issues if you are taking excessive amount of calcium.

So always ask those doctors or you can even ask your nutritionist on how much calcium do you need and how you get those. You can also get calcium in your diet which is even a better way of taking calcium and some of these foods like dairy products, green leafy vegetables, fortified food like cereals and juice and canned fish also has extra calcium.

Regarding vitamin D, there is a lot of variation on how much vitamin you need depending on your age, depending your other health conditions, so check with your doctors.

ask them if you need to get checked your vitamin D level that will also help you guide how much vitamin B

supplement do you Need and it's better to take vitamin b in the dietary form if You can and if have low vitamin d level then you might need some Supplemental vitamin and here are some of the food that contains high amount of vitamin that includes fatty fish egg yolks and even sun exposure can help you get more vitamin D level.

The second important pillar on helping you manage your bone health while you are taking steroids includes lifestyle changes and that includes strengthening exercises.

Bearing exercise puts stress in your bones which are good for your bone health. So always be active. Do as much exercise you could do to maintain good health for the bone while you are taking steroids.

2. Avoid smoking. Smoking can weaken your body. That's why it's very important for you to stop smoking if you're taking steroid. 3. Limiting use of alcohol.

Alcohol can also increase your bone loss. It can increase the risk of osteoporosis.

Monitoring Bone Health with DEXA Scans

That's why if you are taking steroids, try to minimize use of alcohol to protect your bones. And with the lifestyle changes, consistency is the key. Always do your best even to do minimal amount of exercise.

Your bones will be happier if your doing exercises. All of you rheumatoid arthritis warrior, I hope you are learning more about osteoporosis and how it is affected by your use of steroids.

If you like this video, give us a thumbs up. Please put some comment below so that we can understand better on how you're liking our video and also tell us your experience on you managing osteo porosis or bone weakness while you taking the steroids And also don't forget, we are coming up with our live session in the next few weeks.

We'll be hosting a live system to talk everything about steroids. If you have any questions, please join our upcoming question and answer live sessions in mid April.

I'll becoming and I will help you with all of your questions that you had related with osteoporosis and steroid intake. So that next important point that we need to understand is how do we monitor your bone health?

How do we understand how is your bone health? And there's a tool called Dextrose scan, which is basically an x-ray looking at the quality of your bones.

It helps us understand your own health and how we can prevent your risk of fractures in the future. And if you are taking steroid, it is a good idea to ask your doctor if need to have a baseline bone scan so that we can compare the bone health while you're taking steroids.

And it can also help us preemptively prevent osteoporosis and fractures in the future. An important tip. Don't wait for the fractures. If the fracture is already happening, it's already too late.

Hence, having a baseline dex-eye scan give you a tool that helps you understand what your bone health is right now so that you can ask your doctor to do things that can prevent your future risk of fracture.

Now, I just share with you what is our strategy, how we can help you prevent bone loss while you are taking steroids.

Key Takeaways and Prevention Checklist

So be proactive with your bone health. Ask your doctor if you're taking steroid. What is going to affect your own health? How you can prevent the bone help while your taking the steroids?

So practice step regarding your bones help will help prevent osteoporosis as well as fractures. And here's my four

checklist that you can take from our video today so that it helps strengthen your bone while you are taking steroids.

Number one, ask your doctor if you need a bone scan prior to going on the steroid or when you're taking steroids. It helps you understand your own health right now.

Get your calcium and vitamin D level checked and take adequate supplements. And number three, at least do your best to do walking. At least 15 to 20 minutes of walking will help your bone stay stronger and prevent your risk of fractures.

And Number four, be proactive. Ask your doctor on what you can do to prevent bone weakness while you are taking steroids. Thank you all for watching our video and don't forget to like and subscribe to our videos so that more of you RA warriors can get our content to them and also don' forget we are coming up with a live session where I will explain everything about steroids in mid-April and the details will be coming soon and I'll see you in the next video.