

# Osteoporosis

## Osteoporosis – A Silent Killer – What You Should Know?

Osteoporosis can lead to a serious effects like fractures that can be painful and take a long time to heal or might lead to other complications. For example, a hip fracture might require to stay in bed for a long period of time and this in turn can affect into blood clots, lead to pneumonia or other infections.

## What is the best and safest treatment for osteoporosis?

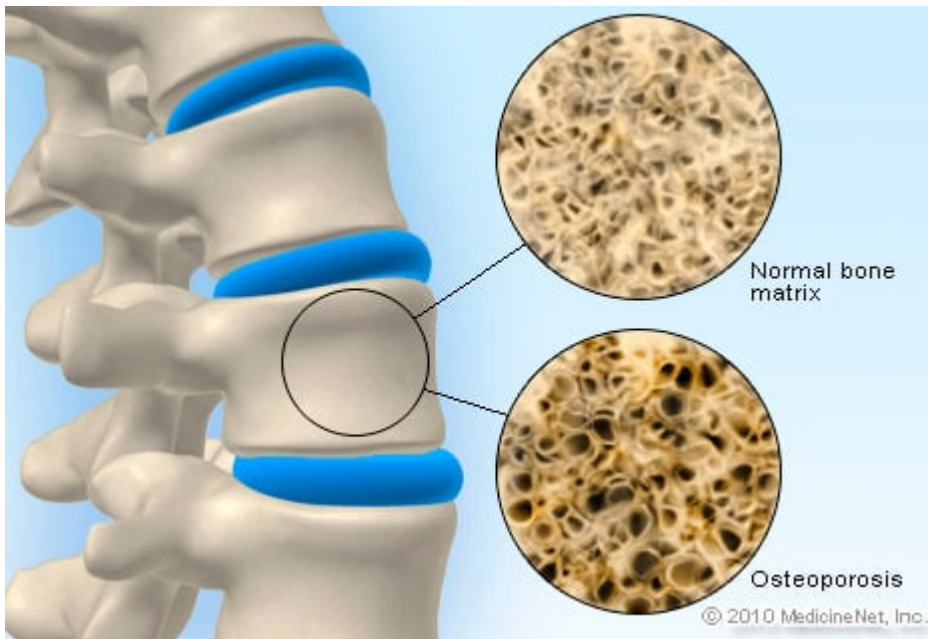
There are many things you can do to prevent and treat osteoporosis like eating right food, exercising and taking proper medications.

If you think you're at risk of osteoporosis, or if you've been diagnosed with it, talk to us and we can work with you to put together for prevention or plan a treatment to improve your bone health. We can also work towards reducing your risk of complications.

If you are thinking, "Who are the **best doctors who treat osteoporosis near me?**" Look no further, connect with our team at AIOR <https://www.orthogyan.com/osteoporosis/>

We are also very proud to know that we have the exact tool to assess osteoporosis – THE DEXA SCAN – a DEXA scan (dual x-ray absorptiometry) is the gold standard test to diagnose the level of osteoporosis using the latest machine available in the world.

Find top doctors for osteoporosis at AIOR – Anup Institute of Orthopaedics and Rehabilitation <https://www.orthogyan.com/osteoporosis/>



## **What do you mean by Osteoporosis?**

Osteoporosis is explained as “porous bone.” It is a condition where the bones become brittle due to hormonal changes and reducing levels of Vitamin D and calcium in the body. When there is loss of bone mass, they become weak. It is most likely that the bones will break if you fall or happen to get injured.

There are several risk factors that make us prone to osteoporosis. These are age, weight, gender (women are more prone to develop osteoporosis), smoking history, alcohol use, fracture history, and of course a lazy lifestyle and low exposure to sunlight.

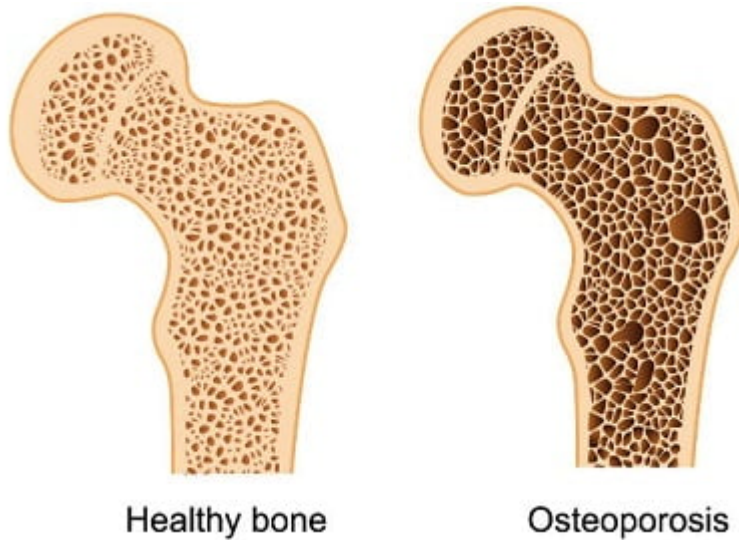
## **Osteoporosis symptoms**

In the early stages of osteoporosis there are no warning signs or symptoms. Thus, it gets a bit tricky to start treatment in the early stages because, more often patients with osteoporosis don't understand that they suffer from this condition until they have a fracture.

**Some symptoms in the earlier stage include:**

1. Receding gums

2. Weakened grip strength
3. Weak and brittle nails



### **Severe osteoporosis**

Without appropriate treatment, osteoporosis can worsen. Risk of fracture increases when bones get thinner and weaker. Symptoms that arise from severe osteoporosis include fracture after a fall or even due to strong cough or sneeze. It includes loss of height or pain in the back or neck.

This can happen due to compression fracture. There can be a break in one vertebra in your back or neck, which is extremely weak causing a break even under a normal pressure on the spine.

If you are experiencing pain in your joints and finding **the best hospitals for osteoporosis treatment**, AIOR is the right choice since it is manned with the **top doctors for osteoporosis**.

Lot of factors affect the healing of the fracture due to osteoporosis. What could be those factors?

How severe is the fracture?

Age of the patient.

Health history.

In the absence of symptoms but presence of family history of osteoporosis, discussing with your doctor can help to analyze the risk.

**Are osteoporosis tests enough?**

**What Does Your FRAX Score Mean?**

**What is FRAX?**

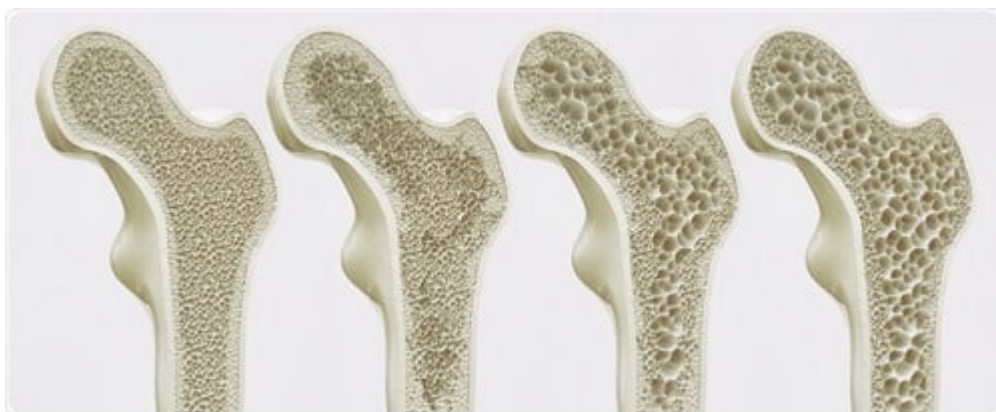
1 out of 2 women above the age of 50 years are susceptible to fracture related to osteoporosis due to bone weakening during menopause.

As men age, they are more susceptible to fractures. Doctors have developed the Fracture Risk Assessment Tool (FRAX) to determine the risk for such injuries.

FRAX score is the risk of having an osteoporosis related fracture in the next 10 years.

**Factors used in the formula for measuring the risks are :**

- Age
- Weight
- Gender
- Smoking History
- Alcohol Use
- Fracture History



## ***Are osteoporosis tests enough?***

*Dual X-ray absorptiometry (DEXA) is the basic test required to diagnose osteoporosis*

### **What does a DEXA scan measure?**

It measures your bone mineral density or BMD. This imaging technique causes no pain to the patient and uses low levels of radiation. During the test, you lie down and a scanner passes over your body. Measuring the BMD of the entire skeleton is possible through some tests.

Other types of DEXA scans check a few bones, like the wrist, spine and the hips. A diagnosis of osteoporosis isn't a guarantee that you'll have a fracture.

BMD test can show how weak are the bones? A FRAX score can throw more light on how much you are at risk.

### **FRAX questionnaire**

The FRAX questionnaire includes only 12 items. But it's important to note that each of these represent an important risk factor.

The factors include:

#### **Age**

The loss of bone mass increases as you age.

#### **Sex**

Women face more risk of suffering from osteoporosis and related fractures. But one cannot deny the fact that men develop this condition too.

#### **Weight**

If you have a low weight and are frail you are more likely to

suffer from osteoporosis.

## **Height**

Your height-to-weight ratio can help determine how frail you are or whether you are overweight.

## **Previous Fracture**

If you've had a spontaneous fracture then the FRAX score will be higher. It will also be higher if you've broken a bone caused by trauma that would not usually cause a fracture in a healthy person.

## **Parent Fractured Hip**

In case your father or mother had a hip fracture then you are at a higher risk of getting a similar injury.

## **Current smoking**

Smoking is a controllable risk factor for osteoporosis and weaker bones.

## **Glucocorticoids**

These medications are recommended to treat autoimmune conditions, allergies and other health issues.

Unfortunately, they can also interfere with the formation of new bone tissue and with your absorption of calcium.

## **Rheumatoid Arthritis**

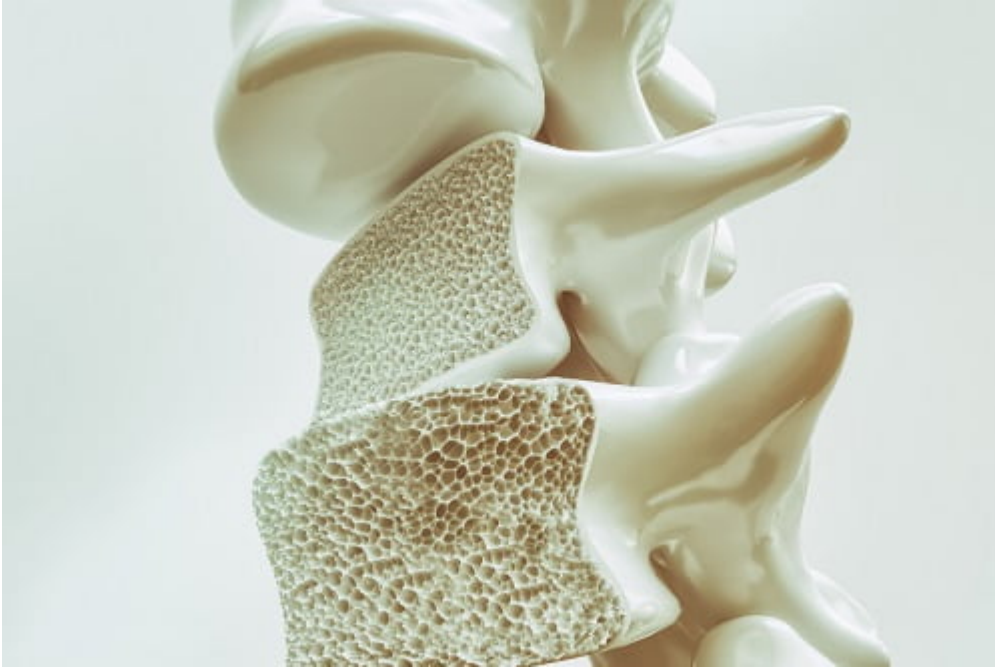
This type of arthritis is an autoimmune condition. It is associated with higher risk of osteoporosis.

## **Secondary Osteoporosis**

This includes conditions related to osteoporosis, such as type 1 diabetes, hyperthyroidism, chronic liver disease, premature menopause (prior to age 45), and several other conditions.

Three or more alcoholic drinks per day

These include beer, wine, and spirits. Excessive consumption of alcohol increases risk of osteoporosis.



### **Diagnosis and osteoporosis treatment :**

**Osteoporosis treatment** is multimodal. It's not as if you have started taking the calcium thus, you do not or will not develop osteoporosis. You should see an orthopedic surgeon first. It is very wisely said that a stitch in time saves nine and yes, you get yourself assessed. We may be able to help you. A proper history and avoidance of risk factors like alcohol consumption, smoking cessation, and sedentary lifestyle changes are very important. A risk assessment is done and proper investigation is a mandate. Apart from Vitamin D levels and routine X-rays – A DEXA scan (dual X-ray absorptiometry) is the gold standard test that quantitatively gives a T score (a score to assess your fracture risk) and your treatment is planned according to this value.

### **How does a bone mineral density test work?**

According to the Radiological Society of North America (RSNA), a DEXA scan is the standard for measuring the density of a

person's bones and their risk for osteoporosis. This painless test uses X-rays to measure bone density.

DEXA scan is performed by a radiation technologist by using a central or peripheral device. Generally, a central device is used in a hospital or at a doctor's office.

The patient has to lie on a table and the scanner is then used to measure the hip and spine bone density. Most often a peripheral device is available at pharmacies and health fairs.

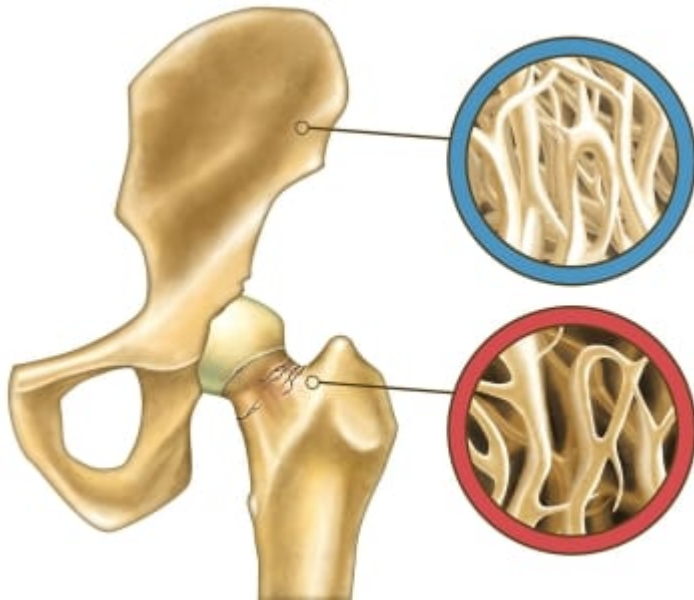
Doctors call peripheral tests "screening tests." The device is smaller and box-like. You can place a foot or arm in the scanner to measure bone mass.

According to the RSNA, the test takes anywhere from 10 to 30 minutes to perform. Lateral Vertebral Assessment (LVA) is used by doctors as an additional test.

Since back pain is both a frequent symptom of vertebral fractures from osteoporosis and a common symptom in general, LVA has been assessed to determine whether it can help doctors differentiate osteoporosis from non-specific back pain.

If someone already suffers from a spinal fracture then it can be determined by a DEXA machinery used during this test. The overall clinical utility of this test in the diagnosis and management of osteoporosis remains controversial.

DEXA imaging results include two scores: a T score and a Z score. The T score compares a person's bone mass with a young adult of the same gender. According to the National Osteoporosis Foundation, the scores fall into the following categories:



greater than  $-1$ : normal

$-1$  to  $-2.5$ : indicates low bone mass and is called osteopenia. This shows that the patient is in the early stages of osteoporosis. This is a potential precursor condition to osteoporosis.

less than  $-2.5$ : typically indicates osteoporosis

A Z score compares a person's bone mineral density to that of people with same age, gender, and overall body type. If your Z score is below  $-2$ , something other than normal aging may be responsible for your declining bone mineral density. Further testing may be warranted.

These diagnostic tests don't imply that you will surely suffer from osteoporosis or a bone fracture. Instead, they assist your doctor in assessing your risk. These tests give a cue to the doctor and guides for further treatment.

#### ▪ FAQ on DEXA scan

##### **What is a DEXA SCAN?**

A DEXA scan is a high-precision type of X-ray that measures your bone mineral density and bone loss.

When bone density is lower than the normal range for your age,

it shows that you are at risk for osteoporosis and bone fractures.

DEXA stands for dual-energy X-ray absorptiometry.

### **What is a DEXA scan used for?**

Bone density scans, also known as DEXA scans, help to work out your risk of breaking a bone. This is used to diagnose bone related health conditions like osteoarthritis or to assess the risk of suffering from them.

### **Is a DEXA scan safe?**

How safe are bone density (DEXA) scans? Bone density scans are very safe. These scans use low level of radiation as compared to X-rays so, the technicians conducting the scan can be present in the scanning room during the scanning process.

### **How long does a DEXA scan take?**

X rays passing through the body are measured by the X ray detector inside the scanning arm.

This information will be used to produce an image of the scanned area. The scan usually takes 10 to 20 minutes.

### **What can show up on a DEXA scan?**

The basic purpose of a DEXA scan is simple. It helps in assessing if the person's bones are weak or at risk of having a fracture. It also helps a doctor diagnose osteoporosis.

When a person suffers from osteoporosis the bones lose density and become thin.

When the bones get thin, they also become fragile, which makes them more susceptible to breaks.

### **Does a DEXA scan show body fat?**

A Body Spec DXA scan or commonly called as DEXA scan is a simple test. It takes 10 minutes and gives a comprehensive picture of exact breakdown of bone, muscle mass and fat tissue.

The DXA scan is the most accurate and precise body fat test available. DXA stands for dual-energy x-ray absorptiometry.

### **Can a DEXA scan show a tumor?**

A DEXA scan measures bone mineral density. It helps the doctor to evaluate bone health and know the possibilities of osteoporosis or bone fractures. This test helps to detect if the cancer has metastasized, or spread over to the bones.

### **What should I do before a DEXA scan?**

DEXA scans are usually outpatient procedures. No special preparations are required. Only that you have to stop taking any calcium supplements 24 hours before the test.

Also, wear comfortable clothes. You need to take off your clothes with hooks, zippers or metal fasteners, depending on the body area that has to be scanned.

### **DEXA scan can show a fracture?**

DEXA scan detects weak or brittle bones to help predict the odds of a future fracture.

It determines if someone should be taking medication (such as a bisphosphonate) to slow bone loss.

Finding an osteoporosis specialist in Patna, India is now possible. Visit AIOR – Anup Institute of Orthopaedics and Rehabilitation

<https://www.aior.co.in/best-orthopedic-hospital.php> since it is one of the best osteoporosis treatment centers in Patna, India.