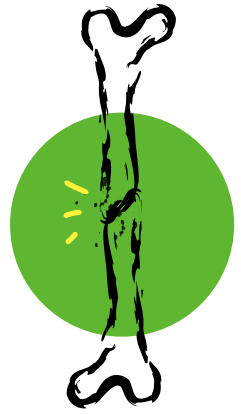


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King Faisal Specialist Hospital & Research Centre
مؤسسة عامة Gen. Org.



For Better Health Series (14) Osteoporosis: What Do You Need to Know? (Part One)

Hussein Raef, MD
Consultant Endocrinologist

This problem takes the attention of many others as well as media and the social networks that result in fears which are right or sometimes exaggerated. It is noticeable that the medical practice of this problem may range from excessive and negligent, such as exaggeration in the diagnostic tests at early ages or overlooking those carrying the characteristics of the disease and risk factors without performing proper procedures and treatment.

What is osteoporosis and what are its manifestations?

There is a state of building and continuous demolition in the bones naturally to regenerate the bones and in the first years of life the building prevails so the strength of the bones increases especially in the age of growth and youth and reaches its peak in the thirties of age, then the demolition gradually diminishes and the bones strength slowly decreases. This may be considered a natural phenomenon, but there are factors that may increase this deficiency and turn it into a condition.

We understand that osteoporosis is a state of thinning of the bones thickness and the number of Trabeculae bones that make up the bones structure which makes it susceptible to breakage due to light shocks and normal falls, as the picture below shows. It usually occurs after menopause in women, after the age of 50 in men, but more after the age of 65 for both. There is a medical definition that relies on measuring bone fragility with the special DEXA device compared to a young bone, and it is expressed with a number that is less than -2.5 when suffering from osteoporosis.

Osteoporosis often gives no symptoms unless when a bone fracture, such as the wrist or thigh, or atelectasis in the bone vertebra that causes acute pain. However, it may sometimes manifest in exaggerated shortages of length or in back bending. Fractures also result in chronic problems such as pain, weakness, decreased mobility and functional ability.

What Are the Causes and Risk Factors of Osteoporosis?

In addition to the gradual decrease with age, the following factors help to further decrease in bone strength:

First: Lack of achievement of normal bone mass and strength that is appropriate for age during youth, and this may be due to the presence of chronic diseases that hinder this or for genetic reasons. Studies have also shown that good nutrition and sport during the age of youth help to maintain stronger bones.

Second: The menopause and the years following it are associated with an increase in the decrease in bone strength due to a lack of estrogen and may be more severe in some women for genetic reasons.

Third: There are factors that make the person more vulnerable to this problem, and among these factors:

- Occurrence of a bone fracture after the age of fifty with a slight trauma or fall is clinical evidence of the presence of osteoporosis
- A family history of fracturing the femur especially for the mother
- Smoking and drinking alcohol
- Cortisone administration and other similar medications especially for a period of more than three months
- Having some diseases such as rheumatoid arthritis and diabetes for a period time
- Weak bones density when measured with a DEXA test is a risk factor for a fracture when it indicates osteoporosis

All of these factors when come together in a postmenopausal woman or in a man after age of fifty indicate to check for fragility or lack thereof as we will see later.

Ways to Prevent Osteoporosis

- Good nutrition rich in calcium and vitamin D in the period of development and youth with the exercise seems to be necessary to have strong bones and this makes the probability of osteoporosis less in the years of old age and beyond because we start with a high bone density, also the calcium and vitamin D and exercise that maintain bones and muscles strength such as walking and running And athletics make the decrease in bone density slower
- Avoid smoking and avoid drinking alcohol
- Minimize the use of cortisone medically with keeping monitoring it, as well as take preventive measures when necessary to take it
- Avoid falls and making the living room for the elderly safe from falling will reduce the incidence of fractures.

But when should we look for the presence of osteoporosis at any age and what are the methods of diagnosis and treatment? This is what will be our next topic.