

Commentary

Osteoporosis: Definition, Causes, Symptoms and Treatment

Amy Williams*

Department of Orthopaedics, Victoria University, Australia

**Address Correspondence to Amy Williams, E-mail: amywilliams@gmail.com*

Received December 07, 2021; Accepted December 21, 2021; Published December 28, 2021

Copyright © 2021 Amy W. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Introduction

Osteoporosis means the formation of pores in the bone. The osteoporosis increases the risk of fractures as the bones become weak. There will be loss of bone strength and bone mass. The Osteoporosis does not show any symptoms until the disease becomes severe and results in fractures. Mostly the long bones of the body like hip spine and the complicated joints like knee and wrist are affected. Osteoporosis causes bones to become brittle and weak, to the point where a fall or even little pressures like bending over or coughing can result in a fracture.

Both men and women are prone to be affected by osteoporosis. The disease mostly seen in Asians, white races. Medications, a good diet, and weight-bearing exercise can all help prevent or strengthen bone loss. Osteoporosis develops gradually, and a person may not realise they have it until a fracture or break occurs as a result of a minor occurrence, such as a fall. Even a simple cough or sneeze can cause osteoporotic bones to break. People with osteoporosis are more likely to break their hips, wrists, or spinal vertebrae. A break in the vertebrae of the spine can cause changes in posture, a stoop, and spine curvature. People may also notice a loss of height or find that their clothes no longer fit as well as they once did.

The bone inside has a sponge like tissue which has tendency to grow, this type of bone is called trabecular bone and this spongy structure is enclosed by outer layer called cortical bone which is hard protection for the bone. In the osteoporosis, the holes inside the bone become more in number and even the diameter of the holes become more and this leads to the weakening of the bone. The bones provide mechanical and structural support to the vital organs. They act as reservoirs for Calcium and other minerals. When there is

requirement of calcium, there will uptake of calcium from the bone. This process, known as bone remodelling, provides the body with necessary calcium while maintaining bone strength.

Some osteoporosis risk factors are beyond your control, such as: Women are much more prone than men to acquire osteoporosis. The risk of osteoporosis increases as you get older. Whites and Asians are more prone to develop osteoporosis. It is hereditary disorder, so in case if any of the family members are suffering, one has chances of developing it too. People having small bone frames are at a higher risk because they may have less bone mass to draw on as they get older.

Dual-energy X-ray absorptiometry (DEXA or DXA) scans are another name for bone mineral density (BMD) testing. These X-rays employ very small doses of radiation to assess the strength of the bones in the spine, hip, and wrist. Regular X-rays will only diagnose osteoporosis after the disease has progressed significantly. Osteoporosis treatment aims to decrease or stop bone loss while also preventing fractures. Your doctor may advise you to do the following: Proper nutrition is essential, changes in your way of life, exercise, fall avoidance is important in order to avoid fractures, medicines.

Acknowledgments

The Authors are very thankful and honored to publish this article in the respective Journal and are also very great full to the reviewers for their positive response to this article publication.

Conflict of Interest

We have no conflict of interests to disclose and the manuscript has been read and approved by all named authors.