



ISSN No: 2319-5886

International Journal of Medical Research and
Health Sciences, 2025, 14 (3): 1-2

Women and Osteoporosis

Vineesha M*

Department of Pharmaceutical Chemistry, St. Josephs College of Pharmacy, Cherthala, Kerala, India

**Corresponding e-mail: vineeshamannambalath18@gmail.com*

Received: 02-February-2024, Manuscript No. IJMRHS-24-126620; **Editor assigned:** 05-February-2024, PreQC No. IJMRHS-24-126620 (PQ); **Reviewed:** 19-February-2024, QC No. IJMRHS-24-126620; **Revised:** 18-March-2025, Manuscript No. IJMRHS-24-126620 (R); **Published:** 25-March-2025

INTRODUCTION

Now a day's osteoporosis is common in a woman which leads to several health issues. The decreased bone density and low calcium intake in food contributes to the above condition. Among the humans, the women are more prone to develop osteoporosis. Especially the nursing mothers should take extra calcium supplements. Osteoporosis is a disease that weakens bones, increasing the risk of unforeseen fractures. Literally indicating 'porous bone', osteoporosis results in an increased loss of both bone mass and strength. The disease may progress without any pain or symptoms-this is why it is often referred to as a 'silent disease'. The condition of osteoporosis can be treated with medication.

DESCRIPTION

What is osteoporosis

Osteoporosis is a progressive bone disease that results in weakened bones, making them more susceptible to fractures. It is often referred to as a "silent disease" because it typically does not present symptoms until a fracture occurs. The most common sites for fractures related to osteoporosis are the hip, spine, and wrist. According to the National Osteoporosis Foundation, approximately 1 in 2 women over the age of 50 will break a bone due to osteoporosis.

Why are women more at risk

Hormonal factors: One of the primary reasons women are more susceptible to osteoporosis is hormonal changes, particularly the decline in estrogen levels during menopause. Estrogen plays a crucial role in maintaining bone density. When estrogen levels drop, the rate of bone resorption (the process by which bone is broken down) increases, while bone formation does not keep pace.

Age: As women age, bone density naturally decreases. The peak bone mass is typically reached in the late twenties to early thirties. After this peak, bone resorption gradually outpaces bone formation, leading to a net loss of bone density over time.

Body size: Women generally have a smaller bone structure than men, which means they may have less bone mass to begin with. This smaller reserve can make them more vulnerable to osteoporosis.

Life expectancy: Women tend to live longer than men, increasing their risk of developing osteoporosis. The longer women live, the more likely they are to experience the bone loss associated with aging.

There are two different types of osteoporosis that women are more likely to develop. Type 1 is a type of osteoporosis that begins after menopause. Following menopause, women's bodies make less estrogen. Since estrogen is essential to helping protect bone density, bone loss often occurs. Some women lose up to 25% of their bone density in the first 10 years following menopause. Type 2 is a type of osteoporosis that occurs after age 70. Women typically live longer than men, making them more prone to this type of osteoporosis. Osteoporosis occurs when bone density decreases and the body stops producing as much as it did before. It is due to some factors like low calcium intake in food, menopause related issues etc. The person who is seen with osteoporosis shows symptoms like back pain, loss of height over time, a stopped posture. When we move on to the risk factors it is more prone to women and post-menopausal women. Also smoking, alcohol, family history, inactive lifestyle, thin/small frame, calcium and vitamin deficiency, getting older, corticosteroids, anti-seizure medications and medical condition that weaken calcium absorption etc. are the risk factors of osteoporosis.

The diagnosis of osteoporosis can be done by DEXA scan (Dual X-ray absorptiometry scan) measures bone density by passing a high and low energy X-ray beam through the body, usually in the hip and the spine. For the post-menopausal women DEXA result is based on the T score. The T score is equal to or above -1.0 is considered normal bone density. The T score between -1.0 and -2.5 is considered as low bone density, referred as Osteopenia. The T score -2.5 and below is considered as osteoporosis. Other than the DEXA scan, ultrasound scan is also used to determine the bone density. Also we collect blood samples and urine samples to check the values.

Move on to the treatment, medication is the proper care for osteoporosis. Now days the modern technology become popular in clinical side. Hormone replacement therapy can be used. More over from the above technique, first of all the person suffering from osteoporosis should take nutrition for strong bones. Also do proper exercise to regain better health. The prevention of this disease can be done by avoiding alcohol intake, stop smoking and take calcium and vitamin D supplements and do walk.

CONCLUSION

Osteoporosis is a significant health concern for women, particularly as they age. Understanding the risk factors, taking preventive measures and seeking early diagnosis and treatment can help manage and mitigate the impact of this condition. By prioritizing bone health through a healthy lifestyle and regular check-ups, women can empower themselves to lead fulfilling and active lives, even in the face of osteoporosis.