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For a better bone health

Osteoporosis is a major global public health problem associated with significant morbidity, mortality, and socio-economic burden and has numerous medical implications. Osteoporosis is a disease where decreased bone strength increases the risk of a broken bone. Worldwide, osteoporosis causes more than 8.9 million fractures annually, resulting in an osteoporotic fracture every 3 seconds.

Osteoporosis is a condition that can be managed and treated if diagnosed early and accurately. Unfortunately, it is often undiagnosed until a fracture occurs. So it is of utmost importance that we should create awareness about this disease.

The elderly population is more susceptible to suffer fragility fractures due to various factors like age, lifestyle choices, dietary habits, medical conditions and treatments. Indians usually eat a low-protein, low-calcium and high-carb diet. They are also chronically low on vitamin D, which is not at all good for the bone health. Prevention includes regular and adequate intake of calcium and vitamin D, and exercise.

Risk factors beyond human control:

Age: The older you get, the greater is your risk of osteoporosis.

Sex: Women are much more likely to develop osteoporosis than men.

Family history: If your mother or father experienced a hip fracture or had osteoporosis, it puts you at greater risk.

Risk factors that can be controlled:

Dietary factors

Low calcium intake: A lack of calcium plays a major role in the development of osteoporosis. Low calcium intake contributes to diminished bone density, early bone loss and an increased risk of fractures.

Eating disorders: People, who have anorexia, are at higher risk of osteoporosis. Low food intake can reduce the number of calories and amount of protein and calcium ingested. In women, anorexia can stop menstruation, leading to weaker bones.

Lifestyle factors

Sedentary lifestyle: People who spend a lot of time sitting have a higher risk of osteoporosis than those who are more active. Any weight-bearing exercise and activities that promote balance and good posture are beneficial for your bones.

Excessive alcohol consumption: Regular consumption of more than two alcoholic drinks increases your risk of osteoporosis.

Other factors include tobacco addiction, lack of exposure to sunlight.

The incidence of osteoporosis in women is higher in India. A common osteoporosis test, Dual X-ray absorptiometry (DEXA), is highly recommended for every woman beyond 40 and above annually. It measures people's spine, hip or total body bone density to help gauge fracture risk.

A major factor for the low bone mineral density (BMD) and poor bone health of Indians is the high prevalence of vitamin D deficiency. Poor sunlight exposure, use of sun blocks, vitamin D-deficient diet, low calcium intake are some obvious causes for this.

A healthy lifestyle, diet, exercise and sunlight exposure can have a major positive impact on the bone metabolism and bone health of Indians. These public health measures are recommended for the population at large as these are efficacious, safe and cost-effective.

There is also a need for early interventions like adequate calcium intake, vitamin D supplementation, and other lifestyle changes.

(Inputs from Dr Vishal Peshattiwar, Head of Department, Spine Surgery, Global Hospitals, Mumbai)