

All you wanted to know about osteoporosis

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WHILE getting out of his car, Vipul Shah could not balance his foot properly and tried holding on to the door. As he did, so he experienced a sharp pain in his hip. He was hospitalised and was diagnosed to have fractured his hip-bone. Another case, Gracy D'Souza, an elderly lady slipped in her bathroom, as she tried to balance herself with her hand and broke the bones of her hand. Anita, a 45 years old lady got a bump when she was travelling in a city bus and had severe pain in her back. She was informed that there was a fracture in of her backbones.

Interestingly, all these cases are people who suffer from Osteoporosis. However, most people are unaware of this illness.

What is Osteoporosis?

It refers to a group of bone diseases that are characterised by decreased density of the normally mineralised bone. As the name implies, the bone becomes abnormally porous and thin. This weakens the mechanical strength of the bone, thus making it much more likely to break, often with little or no injury.

What is the magnitude of this problem?

Osteoporosis has already reached pandemic proportions. It is one of the major health care challenges in the new millennium. It causes significant amount of morbidity and mortality and is a scourge of the aged, especially women. According to the World Health Organization- WHO, one in three post-menopausal women (women in whom monthly periods have stopped) are osteoporotic. A woman leads almost one-third of her life in the post-menopausal period. It has been found that lifetime risk of any fracture in woman aged more than 50 years is 75 per cent. Thus the consequences of this disease are devastating and can lead to illness, pain, functional limitation, reduced quality of life and even death.

Why is osteoporosis called a Silent disease?

It is called as Silent disease, because such as life-style, diet and family history are not very obvious symptomatic markers. Early osteoporosis is not symptomatic and significant bone loss becomes evident only after a fracture of

hip or backbone has occurred.

What are the risk factors leading to this problem?

■ Life - style

1. General inactivity or sedentary life style- COUCH POTATOES
2. Prolonged bed rest due to any medical problem
3. Cigarette smoking
4. Alcohol abuse
5. Excessive coffee consumption

■ Diet required

1. Vigorous diet control or crash dieting in teenagers and younger women leads to low peak bone mass, which eventually leads to this problem.
2. Low intake of calcium
3. Low intake of vitamins, especially D and C
4. Low intake of proteins and milk products in the diet

■ Drug use

1. Steroid drugs taken for diseases like asthma etc
2. Extended use of thyroid hormone replacement therapy
3. Anticoagulant drugs used for heart problems
4. Anti-cancer drugs, treatment for chronic kidney, lung or gastro-intestinal diseases

What are the manifestations of this disease?

Osteoporosis itself does

not cause pain or deformity. It is the fracture and associated problems that cause pain. Commonly the bones of the back, hip and wrist are involved. If the back bones are fractured, there is loss of height and the person bends forward as he stands or walks.

How does one learn that s/he or she is suffering from this disease?

All men above 50 years and women over 40 years, especially post-menopausal women and those with long standing illnesses must take medical attention regarding this problem. Simple blood and urine tests and x-rays can diagnose this problem. A DEXA Scan which measures the bone mineral density (BMD) confirms the disease.

What should one do when this problem is detected?

Osteoporosis is more effectively prevented than treated. There are medicines to treat osteoporosis in earlier stages and if one sustains a fracture, it needs to be attended by a doctor.

How can one prevent Osteoporosis?

● The primary goal of prevention is to achieve as high

a peak bone mass as possible by the age of 30 to 35 years. How can this be accomplished: With proper nutrition, sufficient exercise and minimising risk factors (smoking, alcohol consumption and immobilisation).

● By continuing these beneficial habits throughout the adulthood to maintain the bone mass.

● By increasing calcium intake as the age advances and appropriately using medicines which reduce bone loss or boost its formation.

How can one prevent fractures which result from osteoporosis?

Most of the fractures are due to falls

1. Older persons and their families should remove any obstructions around their house that may precipitate a fall.
2. Scatter rugs should be removed.
3. Bathrooms and kitchen should have non-skid flooring.
4. All clutter and loose electric wires should be removed from floor and stairs.
5. Handrails should be placed in bathrooms and staircases.
6. All rooms and stairs should be well lit.

7. One should avoid taking medicines that cause dizziness or lightheadedness.

What diet helps in preventing osteoporosis?

During childhood and adolescence, parents should ensure that their children attain highest normal bone density as possible by adequate nutrition and regular exercise. In addition to eating a well-balanced diet, children should consume enough calcium rich foods such as, Low fat dairy products, Green leafy vegetable and fish. Adolescent girls must be targeted for special attention because they often eat poorly or irregularly and they rarely consume adequate amount of calcium.

Does exercise help in prevention of osteoporosis?

In children and adults regular exercise is essential for maintaining bone mass. In younger individuals light weight training, jogging, cycling and non contact sports like swimming is advised. In older persons a daily 30 - minute walk is ideal. The bone is a mineral bank whose assets must be built up, maintained, and ultimately protected. The development of lifelong habits of proper nutrition and exercises, avoidance of risk factors