

ADVANTAGE

Osteoporosis



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Osteoporosis is a disease that results in bones having decreased density and quality.

Osteoporosis Risk Factors



Alcohol abuse



Smoking



Malnutrition



Immobility



Lack of calcium



Steroids

How is Osteoporosis treated?

1 Calcium and Vitamin D provide bone strength

2 Drug therapy

3 Weight-bearing exercises



Questions and Answers

for Dr Thapelo Motshudi

- 1 What is Osteoporosis?**
Osteoporosis is a disease that results in bones having decreased density and quality. As a result the bones become very fragile and brittle, making it easy to sustain fractures. The spine, hips, pelvis and arms are most at risk. These fractures are difficult to treat and significantly reduce the quality of life of the affected individuals and in many cases, unfortunately also lead to death.
- 2 How does it present?**
Most people are diagnosed with Osteoporosis after they develop a fracture. Fractures of the spine sometimes go undetected until the spine collapses and shortens. The person experiences backache, unaware that it is caused by a fracture of the spine. Other areas fracture quite easily with simple falls or minor trauma that would not otherwise have resulted in a fracture. The pain is sharp and quite significant over the affected area, with the exception of most spinal fractures. These are mostly painless, until very late when the spine collapses. Affected people experience worsening pain with movement, therefore they may avoid moving. Because the fall or the trauma is usually minor, most people do not suspect that they may have fractured a bone.
- 3 What are the risk factors?**
Osteoporosis is either primary, meaning it occurs naturally on its own, or it can be secondary to other disease processes that result in a reduction in the crucial elements of bone structure. The following are risk factors:
 1. Genetic predisposition
 2. Lifestyle factors such as heavy alcohol abuse or smoking, malnutrition, and long term immobility
 3. Hormonal disorders, cancers and the use of drugs such as steroids over prolonged periods
 4. Premature menopause or lack of calcium.
- 4 How is Osteoporosis diagnosed?**
Frequent persistent pain, despite the use of pain killers or anti-inflammatories, leads to investigations that include x-rays. On x-ray, the bone density appears severely decreased, which then leads to further investigations and diagnosis. The doctor will refer the person for blood tests to assess the mineral levels, hormones and other basic blood functions. In addition, bone mineral density scans and other radiology tests may be required for the correct diagnosis to be made. It is important that the doctor establishes whether the individual has primary or secondary osteoporosis in order for appropriate treatment plans to be put in place.
- 5 How is Osteoporosis treated?**
Treatment focuses on ways to increase bone strength and to reduce the likelihood of fractures. Drug therapy is recommended in females who are post-menopausal as a way to counter the effects of reduced estrogen on bones.
 - Calcium and Vitamin D are two of the important substances that provide bone strength. These supplements are important in the prevention and treatment of Osteoporosis
 - Weight-bearing and muscle strengthening exercises also reduce the likelihood of fractures
 - Secondary Osteoporosis requires treatment of the primary cause and may include drug therapy.

Osteoporosis is a common disease and its effects can be avoided through pro-actively discussing it with your treating doctor. Having the correct tests, exercises, and taking the appropriate supplementation and treatment may go a long way to avoiding the disastrous effects of Osteoporosis.