OSTEOPOROSIS

Osteoporosis is a silent disease characterized by fragile bones (also referred to as low bone density)… leading to fracture, either spontaneously or after minor trauma such as a fall. Common osteoporotic fracture sites (also called "**fragility fracture**s") are the wrist, neck of femur and spine. Spine factures develop slowly, and may cause backache (although many patients have no symptoms), a curved spine, or loss of height.

Who gets osteoporosis?

This is a condition of postmenopausal women – and the risk of fracture increases with age. Men, younger women and children can also develop osteoporosis if they have risk factors

What are the risk factors for osteoporosis?

- previous fragility fracture
- postmenopausal status
- age (>50 years for women and >65 years for men)
- females
- low body mass index (ie being underweight)
- family history of hip fracture
- longstanding inflammation (for example uncontrolled rheumatoid arthritis)
- hypogonadism (particularly low testosterone levels in males)
- hyperthyroidism (overactive thyroid gland)
- smoking
- corticosteroid use
- excessive alcohol use
- prolonged immobilisation
- prolonged calcium or vitamin D deficiency
- heparin or anticonvulsant use

How is osteoporosis diagnosed?

A DEXA ("dual-energy X-ray absorptiometry") scan should be offered to postmenopausal women and men with risk factors, or to persons with a fragility fracture. A DEXA T-score <-2.5 confirms the diagnosis of osteoporosis (a T-score <-2.0 is termed "osteopenia"). Blood tests to measure calcium, Vitamin D, thyroid hormone levels and kidney function together with a testosterone level in men may help clarify the risk factors.

How is osteoporosis treated?

Bisphosphonates

The most widely used medication is bisphosphonates – either as an intravenous dose [put into a drip in your arm] once a year, or as a tablet taken every day or once a week. This treatment is usually offered for 3-5 years – with a DEXA scan repeated every 3-5 years to ensure bone density is improving.

Dietary supplements
Calcium supplements (Calcium 1200 mg daily) and Vitamin D 800IU daily or 50 000IU monthly are usually offered to patients to improve bone strength. Together with this, any underlying hormone or organ problems should be attended to.

Exercise
Weight-bearing exercise is strongly recommended – including walking, walking, dancing, low-impact aerobics, elliptical training machines, stair climbing and gardening. These types of exercise work directly on the bones to slow mineral loss. They also provide cardiovascular benefits, which boost heart and circulatory system health, and they may also elevate your mood. (Unfortunately swimming and cycling do not build bone strength because they are not weight-baring.)

Reduce risk of falls
If you have osteoporosis, find ways to reduce your risk of falls. This might include bathroom and stair handrails, and avoiding loose rugs and clutter that can cause tripping. Balance and strength training – through yoga, pilates, gym workouts or physiotherapy programmes will also improve muscle strength and will reduce the risk of falls.

How will my osteoporosis be monitored?

The bone density test (DEXA) will be repeated every 3 years to decide on the need for further treatment

Contact us:

- Talk to your rheumatologist and rheumatology nurse at your next appointment or phone during clinic times (021) 404 5394 (Monday or Friday) or (021) 404 5313 (Thursday)
- The SA arthritis foundation (www.arthritis.org.za, 021 425 2344) is the charity leading the fight against arthritis, and offers online or telephone advice.