



SAIFEE HOSPITAL

under the auspices of Saifee Hospital Trust Reg. No. B-5448 (Bom.)



DXA - BONE DENSITOMETRY
OSTEOPOROSIS

What exactly is osteoporosis :

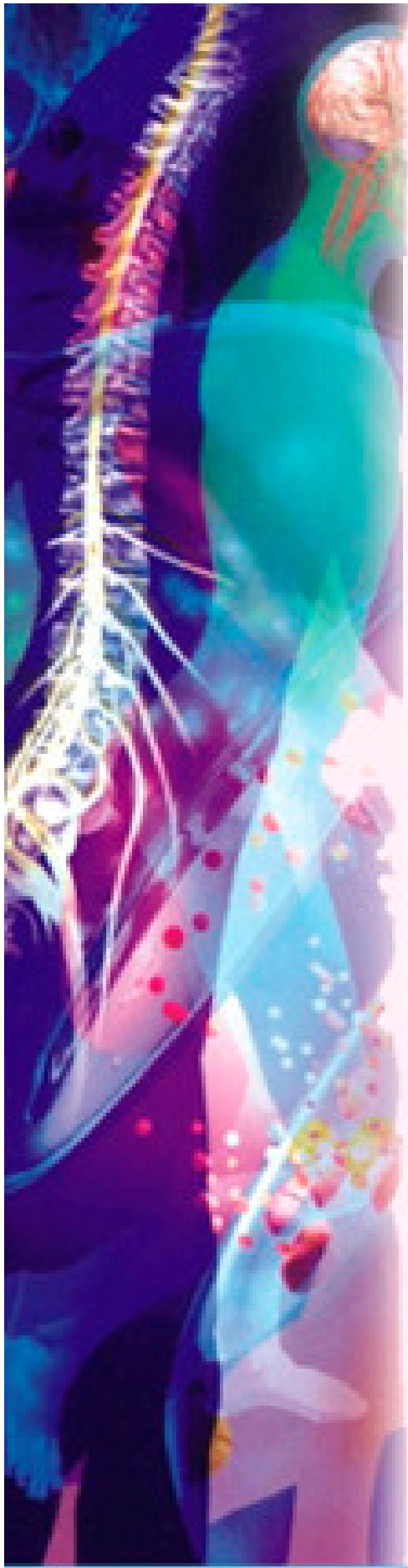
Osteoporosis is a growing healthcare concern affecting millions of men and women worldwide. Fortunately, osteoporosis is detectable and treatable. In osteoporosis, bones become fragile and hence more likely to break. If corrective action is not taken, fractures can result more easily in the hip, spine and wrist, needing hospitalization and surgery.

How does osteoporosis occur ?

Normal bone building takes place until the age of 35. Thereafter, as part of the natural aging process, the bone begins to break down faster than new bone can be formed.

In women, bone loss accelerates after menopause, when ovaries stop producing oestrogen the hormone that protects against bone loss.

The bones become weak, brittle and fragile and even a simple fall may result in a fracture. As bone mass decreases, fracture risk increases exponentially. Women are affected the most. One out of two will have an osteoporosis-related fracture.



Risk Factors :

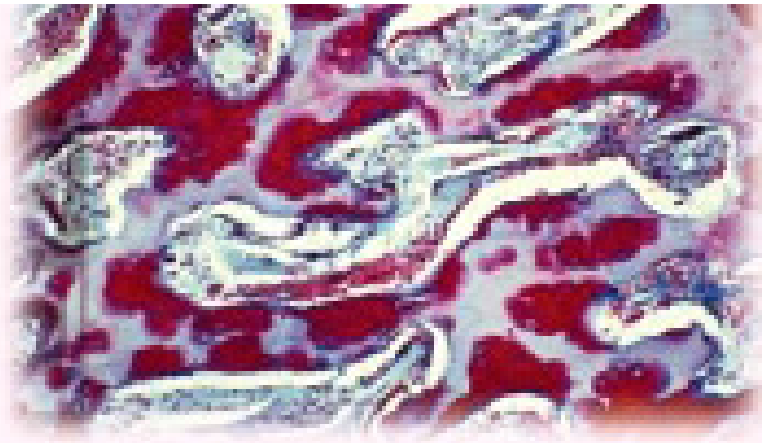
1. Light skinned
2. Early menopause
3. Thin, short stature
4. Milk intolerant
5. Family history of osteoporosis
6. Lifestyle factors :
 - a. Low intake of calcium and vitamin-D.
 - b. Smoking or excessive alcohol intake.
 - c. Caffeinated or carbonated beverages
 - d. Lack of exercise.
7. Certain medicines especially steroids.



Other Imaging Facilities



MRI



Clinical symptoms :

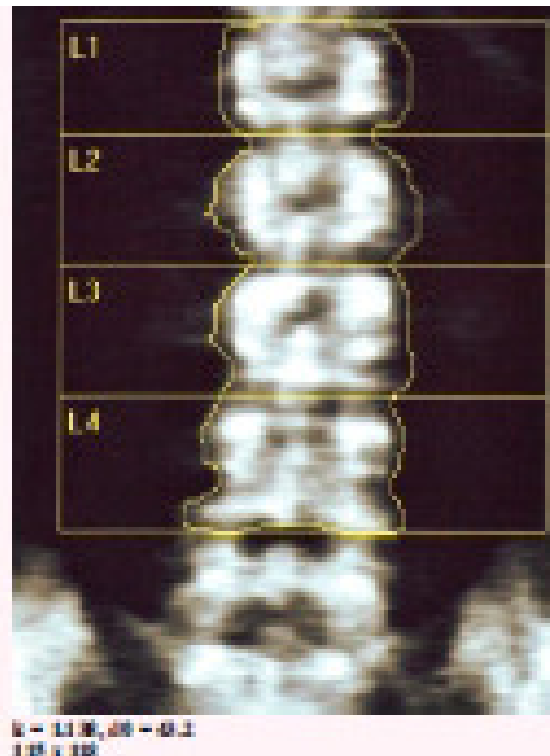
- Back-pain
- Loss of height due to vertebral compression
- Spinal deformity, hump back (Kyphosis)
- Multiple fractures affecting vertebrae, hip and wrist.

This can result spontaneously after some routine activity such as bending forwards to make a bed or lifting vessel from the stove.

Just as no physician would prescribe a medication for hypertension without first taking the patient's blood pressure, the diagnosis and the treatment of osteoporosis should begin with an objective, quantifiable measurement of the patient's bone density.



CT Scan



DXA Bone Densitometry scanning is considered to be “Gold Standard” in accuracy and reliability in diagnosis of osteoporosis. DEXA, which is more popularly known as “DXA” stands for Dual-energy X-ray Absorptiometry. During scanning, the patient is made to lie down comfortably on the padded scan table. Patient can breathe normally through out the entire scanning. The scanning of individual spine, hip or wrist takes approximately 2 to 3 minutes.

Preparation

- No special Preparation is required
- Avoid taking calcium tablet at least four hours prior to your test.
- You should not have had barium study or oral contrast material for a CT-Scan within 2 to 3 days prior to your DXA test.



X-Ray



L-1, L2, L3, L4, L5, P1, P2, P3, P4, P5, S1, S2, S3, S4, S5, T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, C1, C2, C3, C4, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C29, C30, C31, C32, C33, C34, C35, C36, C37, C38, C39, C40, C41, C42, C43, C44, C45, C46, C47, C48, C49, C50, C51, C52, C53, C54, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C80, C81, C82, C83, C84, C85, C86, C87, C88, C89, C90, C91, C92, C93, C94, C95, C96, C97, C98, C99, C100

Can DXA predict future fracture risk?

An international panel has concluded that...

“low bone mass predicts future fracture risk as well as high cholesterol or high blood pressure can predict the risk of heart disease or stroke”

What kind of report is generated?

DXA-Bone Densitometry produces high resolution dual-energy scan. Most common examination sites are the fracture-prone hip, spine and forearm. Evaluation also includes measurements of height and weight, a thorough history, and risk assessment

Report consist of:

- Bone Density Measurements in gm/cm^2
- A comparison of your results with an extensive data base of young normal bone density values (**T score**)
- A comparison of your results with a database of your age and sex matched adults (**Z score**)

This information is critical for your physician in making right diagnosis about your bone status and fracture risk. Doctors can thus distinguish between healthy, osteopenic and osteoporosis patients.

DXA-Bone Densitometry Scan can:

- Detect Osteoporosis before a fracture occurs
- Predict future chances of fracture
- Monitor the effects of treatment over a period of time

DXA & other Imaging Facilities



Ultrasonography



DXA Scan



Mammography



How does one prevent osteoporosis?

Early detection is the key to prevent osteoporosis. Today, doctors are better equipped to detect and treat bone loss in its earliest stages, before irreversible damage takes place. Several preventive measures can be prescribed by your doctor, few of which are:

- Calcium-rich diet or calcium supplements.
- Vitamin-D-Metabolites
- Regular exercise
- HRT for post-menopausal women
- Also several new drug therapies have been shown to be clinically effective in slowing down or reversing the bone loss process.

DXA & other Imaging Facilities



Ultrasonography



DXA Scan



Mammography



DR. RAJEEV MEHTA M.D., D.M.R.E.
HOD Imaging

For details & appointments contact:

SAIFEE HOSPITAL

DEPARTMENT OF IMAGING

Post Box No. 3771, 15 / 17 Maharshi Karve Marg,
Mumbai - 400 004. Tel.: (022) 6757 0111 Extn. 1200, 1201,
Fax : (022) 6757 0777 • E-mail: write@saifeehospital.com

Website : www.saifeehospital.com

