

## **Clinical Indications for DXA Scan**

Based on the Irish Osteoporosis Guidelines for Health Professionals and The American College of Radiology 2008

### **Contraindications (reasons against) for performing DXA:**

- Pregnancy
- Recently had gastrointestinal contrast or radionuclides
- Severe degenerative changes or fracture deformity in the measurement area
- Inability to attain the correct position and/or remain motionless for the measurement
- Extreme obesity or extremely low body mass index that may inversely affect the technique and the ability to obtain accurate and precise measurements

### **Criteria for having a DXA scan**

#### Group 1:

- All women 65 years of age and older
- All men age 70 years and older (asymptomatic screening)

#### Group 2:

- Women under age 65 with additional risk for osteoporosis.
  - Women discontinuing oestrogen or oestrogen deficiency (peri-menopausal and post menopausal women)
  - Early or premature menopause (before age 45 years old)
  - History of amenorrhoea (no periods) for more than 1 year under the age of 42 years
  - History of maternal hip fracture that occurred after the age of 50 years

### Group 3

- Men and women with other risk factors:
  - Eating disorders (current/past)
  - Men younger than 70 with hypogonadism/ testosterone deficiency
  - Adults of any age with fragility fractures
  - Men or women receiving or expected to receive steroid treatment for more than 3 months (e.g. >5mg Prednisolone for more than 3 months in a year)
  - Individuals beginning or receiving long-term therapy with medication known to adversely affect bone mineral density:
    - Anti-coagulants - warfarin, heparin
    - Anti-epileptics - Epinutin
    - Aromatase inhibitors etc (refer to next page for list of medications that may cause osteoporosis)
  - Individuals of any age with radiologic evidence of:
    - low bone mass (osteopenia),
    - vertebral deformity (kyphosis)
    - the presence of vertebral compression fractures.
  - Men and women any age with a disease associated with defect in bone development, low bone mass or bone loss such as:
    - osteogenesis imperfect
    - Hyperthyroidism (overactive thyroid gland)
    - inflammatory bowel disease (IBD).
    - Rheumatoid arthritis
    - growth hormone deficiency
  - Men and women of any age who have the following risk factors;
    - have experienced a loss of height by more than 2cm
    - have had a low BMI (less than 18kg/m<sup>2</sup>)
    - have experienced severe malnutrition or poor nutrition
    - have an excessive alcohol intake (>14 units a week for women and > 21 units/week for men)
    - have been or currently are smokers
    - have a history of taking excessive exercise, particularly with inadequate caloric intake.

## Medications that may cause Osteoporosis

- Chemotherapy
- Radiation
- Thyroxine (Eltroxin), if serum levels are high
- Anticonvulsant therapy or anti- epileptic medications (phenytoin and phenobarbitone)- interfere with calcium absorption and production of Vit. D.
- Chronic heparin or Warfarin therapy
- Long term lithium therapy
- GnRh analogues
- LHRH analogues; testosterone suppression
- Prolactin raising drugs such as antipsychotic medications e.g. some SSRI,
- Aromatase inhibitors for the treatment of Prostatic and Breast Cancers e.g. Arimidex
- Diuretics such as Burinex and Lasix (ferusemide)
- Proton Pump Inhibitors