



Guide to DXA for GPs referring Patients

DXA scanning is the test of choice for measuring bone density.

If you suspect your patient has a vertebral collapse or osteoporotic fracture a plain x-ray is the test of choice.

DXA is indicated for patients who have the following risk factors for osteoporosis:

1. History of prior fragility of wrist or humerus in the last 12 months
2. Parental hip fracture
3. Rheumatoid arthritis
4. Hyperthyroidism
5. Coeliac disease
6. Drug medication e.g. long term therapy with glucocorticoids, thyroid replacement or other medications (such as phenytoin or heparin)
7. Smoking
8. Alcohol use
9. Inactive lifestyle/poor diet

The DXA service will initially provide a peripheral scan, using a DXL Calscan which scans the patients' heel. It enables a highly reliable diagnosis by using a dual

energy x-ray source and a laser. It allows a painless scan of the patients' heel in less than a minute. The bone mineral density is presented on a computer print out that can be used for assessment. It uses a low dose which is 25 x less than the daily dose received from natural background radiations.

Prior to referral?

You should calculate the Fracture Risk Assessment (FRAX) score by visiting the website www.shef.ac.uk/FRAX. To do this you need to know the age, date of birth, gender, weight, height and any previous medical history of fractures, parental fractured hip, current smoking, glucocorticoids, rheumatoid arthritis and alcohol of 3 or more units a day.

Using the FRAX results you can then use the National Osteoporosis Guideline Group (NOGG) for advice on referral and treatments. (www.shef.ac.uk/NOGG). When you calculate the FRAX score using the website, you can automatically choose to see the NOGG advice for the patient you have entered the details in for.

Examination

Your patients will have to complete a questionnaire prior to test. You will get a report, generated from the peripheral scanner which will tell you:

- The Bone Mineral Density (BMD)
- The T Score
- The Z Score

These are presented as values followed by the WHO classification. This will indicate if the density is usual for the age of the patient.

Results

For patients with BMD greater than a T-score of -1.0 then lifestyle advice and reassurance should be given.

For patients with BMD less than a T-score of -2.5 then treatment options can be considered in conjunction with any clinical risk factors.

For patients with T-scores between -1.0 and -2.4 an axial DXA is recommended (NOS position statement peripheral scanners). These patients will automatically be managed by InHealth until we have completed the axial scan.

Recommendations:

If the results indicated normal to low bone density there are a number of useful lifestyle changes which can be recommended:

- Increased calcium and vitamin D intake
- Weight bearing exercise such as walking and stair climbing
- Strength training such as lifting weights
- Stretching exercise for balance, posture and agility
- A well balanced diet
- Stopping smoking
- Reducing amount of colas and caffeinated drinks

NICE issued new guidance on the secondary prevention of osteoporosis in 2010. They recommend that in patients under 75 who have a DXA scan with a T-score of -2.5 SD or below, active treatment with alendronate should be considered. For patients over 75, with a fracture a DXA scan is not necessary if it is considered clinically inappropriate or unfeasible. For more information see www.nice.org.uk

If your patient needs a scan to monitor treatment the peripheral scanner cannot be used. Instead, we will arrange to do an axial scan to be done on one of our Mobile units within 6 weeks.



For further information please call **0844 581 0301**
or visit www.inhealthgroup.com