

## BONE DENSITY SERVICES

North Shore Physicians Group offers state-of-the-art bone density testing, the most effective measure of your future risk of fracture due to bone mass loss (also known as osteoporosis.) These tests are painless and take approximately 20 minutes to complete.

We offer Bone Density testing in two locations:

NSPG OB/GYN Practice, 383 Paradise Road, Swampscott MA (781) 599-2600

NSPG Internal Medicine Practice , 496 Lynnfield Street, Lynn MA (781) 593-3400

### How to Prepare for the test

On the day of the exam you may eat normally. You should not take calcium supplements for at least 24 hours before your exam. You should wear loose, comfortable clothing, avoiding garments that have zippers, belts or buttons made of metal. Inform your physician if you recently had a barium examination or have been injected with a contrast material for a CT scan or radioisotope. If so, you may have to wait 10 to 14 days before undergoing a DEXA test.

### Treatment

There are many treatment options available to help reduce the risk of fracture. Some need to be taken daily, weekly or monthly. Presently there is an option of a yearly injection. No matter what option is taken, the earlier treatment is started, the better it works. Be sure to check with your insurance company for coverage information.

### Types of Bone Density Exams

#### DEXA

This is the most accurate way to measure BMD. It is fast and uses very low doses of radiation and can measure as little as 2% of bone loss per year. It uses two different X-ray beams to



### Prevention

It is difficult to grow new bone after it is lost, so prevention is important. Slowing bone loss helps build strong bones. Weight bearing exercises, aerobic exercise even brisk walking will help reduce bone loss. So will choosing foods with enough calcium [approximately 1200 mg daily] and Vitamin D, including milk and yogurt. Leafy green vegetables, nuts, seafood and cereals fortified with calcium will also help prevent osteoporosis. After menopause, your doctor may suggest medication to protect against bone loss.

estimate bone density in your spine and hip. The area scanned is the lumbar spine (lower back), hips and sometimes forearm. Since strong, dense bones allow less of the X-ray beam to pass through them, the DEXA test compares the percentage of each X-ray beam blocked by bone and soft tissue.

### **Qualitative Ultrasound**

This test is generally used to look for problems. Ultrasound uses sound waves to measure BMD (some machines pass the sound waves through air and some through water.) The area scanned is usually the heel. Ultrasound is quick, painless, and does not use potentially harmful radiation like X-rays. One disadvantage of ultrasound is it cannot measure the density of bones most prone to fracture from osteoporosis (e.g., the hip and spine). Nor is it used to keep track of how well medicine used to treat osteoporosis is working. If an ultrasound test finds low bone density, DEXA is recommended to confirm the results.

### **Peripheral X-ray absorptiometry (DXA)**

DXA is a type of DEXA test. It measures the density of bones in the arms or legs. It cannot measure the density of bones most likely to break, such as the hip and spine. This test also uses very low doses of radiation, and the results are ready faster than standard DEXA measurements.

### **Quantitative computed tomography (QCT)**

This CT scan measures the density of a bone in the spine (vertebra). A form of QCT called peripheral QCT measures the density of bones in your arms or legs and your wrist. QCT is not usually used because it is expensive, uses higher radiation doses, and is less accurate than DEXA, P-DEXA, or DPA.