More About Osteoporosis

Osteoporosis is a debilitating disease in which bones become fragile and are more likely to break. In most cases, it can be prevented and treated but if steps are not taken, it progresses painlessly until a bone breaks.

Osteoporosis affects more than 28 million Americans, 80% of whom are women. In the United States today, 10 million already have osteoporosis and 18 million more have low bone mass placing them at increased risk for developing it.

People need to know whether they are at risk for developing osteoporosis or whether they already have lost so much bone that they already have osteoporosis. While risk factors (see box below) can alert a person to the possibility of low bone density, only a bone mineral density (BMD) test can measure current bone density, diagnose osteoporosis, and determine fracture risk. There are many different techniques that measure BMD painlessly and safely. The majority of these machines use extremely low levels of radiation while ultrasound machines use sound waves instead.

Medicare and many private insurance carriers cover bone density tests to detect osteoporosis for individuals who meet certain criteria. Talk with your doctor about whether or not this test would be appropriate for you.

Depending on the results of the test, you and your physician may decide that you should begin a Food and Drug Administration (FDA) approved medication for osteoporosis to stop bone loss, improve bone density, and reduce fracture risk.

Several medications have been developed to help manage osteoporosis and to strengthen bones in women at high risk for the disease. Hormone replacement therapy (HRT – estrogen and progesterone) helps to prevent osteoporosis by slowing bone loss. However, HRT carries certain risks, most notably an increased risk of breast cancer, and may not be the best choice for some women.

Other medications are available to prevent and manage osteoporosis without the risks associated with HRT. *Alendronate,* a drug known as a bisphosphonate, slows bone loss and increases bone density. Another medicine, *calcitonin,* has been shown to improve bone density and lessen back pain due to osteoporosis. *Raloxifene,* developed to help prevent osteoporosis, belongs to a class of drugs called SERMs, or "selective estrogen receptor modulators." Raloxifene has been shown to build bone without increasing the risks of breast or uterine cancer.

You can do your part to protect bone health by following osteoporosis prevention and treatment strategies.

- ❑ Consume a calcium rich diet that provides 1200 mg of calcium from a combination of foods and supplements.
- ❑ Obtain between 400 and 800 IU of vitamin D each day.
- ❑ Participate in weight-bearing and resistance-training exercises three times a week. This recommendation by the National Osteoporosis Foundation needs to be modified for polio survivors. Each polio survivor must determine what is a beneficial level of exercise and what could be deleterious. *(See front page article.)*

Factors that increase your chances of developing osteoporosis:

Gender – Women are more likely to develop osteoporosis than men due to thinner, lighter bones and the decrease in estrogen production that occurs during menopause.

Age – The longer you live, the greater the likelihood of developing osteoporosis. Although all of us lose bone tissue as we age, the amount and rate of loss varies widely with each individual.

Family History – Susceptibility to osteoporosis is due in part to heredity. If you have had a fracture as an adult or a parent has had a fracture, you are more likely to have low bone mass than your peers.

Ethnicity – Caucasian and Asian women are at highest risk; African-American and Hispanic women are at lower but significant risk.

Body Size – Low body weight (under 127 lbs) and a small-boned frame place you at increased risk.

Lifestyle – A diet low in calcium, inadequate vitamin D, little or no exercise, current cigarette smoking, or excessive use of alcohol are all risk factors for this debilitating disease.

Tips for Taking Supplements

– Avoid the use of bone meal or dolomite (these may contain lead or other toxic metals) unless the supplement has the USP symbol, a sign of purity.

– Calcium is best absorbed when taken in small amounts (500 mg or less) throughout the day.

– More is not necessarily better. Too much calcium can flood your body's absorption sites and keep you from getting enough iron, magnesium, and zinc.

– Drink plenty of fluids.

– Consult your physician about possible interactions between calcium supplements and other prescription or over-the-counter medications. Ask your pharmacist to recommend a supplement.