ARTHRITIS
AND
RHEUMATISM
ASSOCIATES, P.C.

Board Certified Rheumatologists

Herbert S.B. Baraf
MD FACP FACR

Robert L. Rosenberg
MD FACR CCD

Evan L. Siegel
MD FACR

Emma DiIorio
MD FACR

David G. Borenstein
MD FACP FACR

Alan K. Matsumoto
MD FACR

Robert J. Lloyd
MD MACR

David P. Wolfe
MD FACR

Shari B. Diamond
MD FACR

Paul J. DeMarco
MD FACP FACR

Ashley D. Beall
MD FACR

Angus B. Worthing
MD FACR

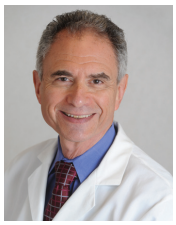
Guada Respicio
MD MS FACR

Justin Peng
MD FACR

Rachel Kaiser
MD MPH FACP FACR

Osteoporosis – who to treat?

The role of FRAX and the new NOF guidelines



Robert L. Rosenberg, MD, FACR, CCD
Arthritis and Rheumatism Associates, P.C.

Since 1995 we have had effective FDA approved therapies to reduce the risk of osteoporotic fractures. Historically we have depended on the findings of osteoporosis by bone mineral density (BMD) or osteopenia with additional risk factors or the presence of an osteoporotic fracture to determine who needs pharmacologic treatment. Patients with osteoporosis and/or osteoporotic fractures certainly benefit from pharmacologic treatment. Patients with normal bone density without fractures do not benefit from treatment. However, 80% of osteoporotic fractures occur in patients considered to be osteopenic by BMD testing. Treating every one of these patients would prevent many more fractures but it is neither practical nor desirable from a cost/benefit risk perspective. We need to identify and focus on those patients at the greatest risk of osteoporotic fracture and offer them treatment.

To address this issue the World Health Organization (WHO) has developed the FRAX (www.shef.ac.uk/FRAX) fracture risk calculator which incorporates femoral neck (hip) BMD and other important risk factors to provide estimates of the 10 year probability of developing a hip or other (wrist, arm, spine) osteoporotic fractures in an individual patient.

The FRAX tool is based on 250,000 patient years of follow-up and has been validated in several large studies. Use of age, height, weight, and risk factors such as family history, presence of inflammatory arthritis, previous fractures, steroid use, smoking and alcohol allows the calculation of 10 year fracture risk.

FRAX has been incorporated into the updated National Osteoporosis Foundation (NOF) US osteoporosis treatment guidelines. The new guidelines recommend that your physician consider FDA approved osteoporosis medical therapies in post menopausal women and men age 50 and older based on:

- Presence of a hip or vertebral (spine) fracture
- BMD T score < -2.5 at the hip or spine (osteoporosis)
- BMD T score between -1.0 and -2.5 (osteopenia) at the hip or spine and a 10 year FRAX probability of a hip fracture >3% or 10 year probability of a major osteoporotic fracture >20%

These are guidelines. Patient and physician preferences may alter implementation of these guidelines.

FRAX is not a perfect tool but it is an excellent application that helps you and your physician understand your fracture risk and potential benefit from therapy. FRAX can also identify patients who would derive little benefit from pharmacologic therapy.

In this time of concern about cost, benefit and risk of long term medications the information provided by FRAX and the new NOF guidelines will assist your physician in making treatment decisions based on fracture risk and benefits of medication rather than just BMD score. Discuss your FRAX score with your physician.