



BONE DENSITY & OSTEOPOROSIS:

An Update for Manitoba Physicians

No. 6: September 15, 2004

Re: Prevent Falls to Prevent Fractures

Why Prevent Falls?

Falls are the leading cause of injury causing hospitalization in Canada, and a major factor in the death of many people over the age of 65. In the USA 1 in 3 adults over age 65 not living in an institution fall each year. This increases to 1 in 2 in those over 80 years of age. Hip fractures are serious injuries that can result from falls. Complications of hip fractures often include a decreased quality of life, prolonged hospitalization, permanent transfer to a nursing home, and higher rates of death within the first year after the fracture. Post-fall anxiety can also lead to a loss of independence. By identifying those at risk for falling, and intervening by changing medications and the environment, many falls can be prevented.

Who Falls?

Risk factors for falling include:

- A history of having fallen before
- Being over the age of 65 years
- Being female
- Taking 3 or more medications per day; especially sedatives, diuretics and antihypertensives
- Suffering from poor hearing or vision
- Suffering from balance problems, previous stroke, or peripheral neuropathy (often from diabetes)
- Using alcohol frequently
- Suffering from muscle weakness and stiff joints

*Fall
Prevention*

Multifactorial Falls Risk Assessment and Management Programs Can Reduce Falls By Assessing:

1. Orthostatic Blood Pressure – reassess antihypertensive medications
2. Vision – when was it last tested?
3. Balance and Gait – consider an exercise referral
4. Medications – reassess sedatives and the number of medications
5. Cognition – look for signs of dementia
6. Environmental Hazards in the Home –
 - remove loose rugs
 - ensure adequate night lighting
 - review bathroom safety – raised toilet seats, skidproof bath mats, bath seats, handrails
 - install stairwell handrails and ensure adequate lighting
 - consider portable phone or Lifeline type systems.

*Exercise
Works*

Exercise programs that include balance and strength training are effective at reducing falls.

Vitamin D

Vitamin D supplementation at 800-1,000 IU/d has been shown to reduce falls, likely by improving muscle strength.

Osteoporosis

Remember to assess risk factors for osteoporosis and consider the need for BMD testing and antiresorptive treatment.

From the Manitoba Bone Density Program

This newsletter and other program information are available through the Manitoba Health web site (<http://www.gov.mb.ca/health/programs/mbd/index.html>).