Cochrane Corner

Fracture prevention in post-menopausal women

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For white women the lifetime risk of a fracture is 20% for the spine and 15% for the wrist and 18% for the hip. Fractures may result in disability from pain through to death. There is a substantial increase in mortality in those women who sustain a fracture when compared with those who do not. One of the risk factors is reduced bone mineral density. This can be improved with a number of medications. Fractures can also be prevented by wearing hip protectors. For GPs a big issue is whether or not to screen for osteoporosis.

The US Preventive Services Task Force (USPSTF) now recommends that women aged 65 and older be screened routinely for osteoporosis.[1] The National Screening Committee Policy Position – March 2003 – in the UK does not recommend routine screening. The USPSTF also recommends that routine screening begin at age 60 for women at increased risk for osteoporotic fractures (B recommendation – fair evidence).

The USPSTF makes no recommendation for or against routine osteoporosis screening in postmenopausal women who are younger than 60 or in women aged 60–64 who are not at increased risk for osteoporotic fractures (C recommendation).

As yet there is no recommendation from any New Zealand based organisation.

To estimate the benefits of routine screening for women in different age groups the US Preventive Services Task Force (USPSTF) used estimates from recent studies to project the number of fractures that would be prevented over five years from screening and treatment of a hypothetical cohort of 10 000 postmenopausal women. For women aged 55–59, more than 4000 would need to be screened to prevent one hip fracture and more than 1300 to prevent one vertebral fracture. For women older than 60, the number needed to screen to prevent one hip fracture is 1856 for women aged 60–64, 731 for women aged 65–69, and 143 for women aged 75–79. The benefits of screening improve substantially in older women because osteoporosis is both more prevalent and more likely to lead to a fracture in older women.

See the table overleaf for a summary of interventions.

Table 1. Summary of interventions

	Benefits	Evidence	Advantages	Disadvantages
Alendronate	Beneficial	Clinical Evidence[2]	Effective	Special criteria to obtain and GI adverse effects
Calcitonin in women with osteoporosis	Beneficial	Clinical Evidence[2]	Effective	
Calcium	Beneficial in women with a fracture	Clinical Evidence[2]	Effective	Only effective in women with previous fracture
Calcium with vitamin D	Effective	Cochrane review[3]	Effective	Increased risk of hypercalcemia
Hip protectors	Effective	Cochrane review[3]	Effective. Developed in New Zealand	Contact http://www.impactwear.co.nz/
Etidronate	Probably effective	Clinical Evidence[2]	Probably effective	Specialist approval to obtain and GI adverse effects
Hormone replacement therapy	Effective	Clinical Evidence[2]	Effective	Increased risk of heart disease and breast cancer therefore not routinely recommended
Exercise	Unknown effectiveness	Clinical Evidence[2]	Unknown effectiveness	Time and small risk of further falls
Vitamin D alone	Unlikely to be beneficial	Clinical Evidence[2]	Unlikely to be beneficial	Unlikely to be beneficial

References

1. http://www.ahrq.gov/clinic/uspstfix.htm.
2. Clinical evidence fracture prevention in postmenopausal women BMJ publishing.
3. Cochrane library; www.Cochrane.org – see below.

Members of the Royal New Zealand College of General Practitioners can have access to the full reviews by contacting Cherylyn Pearson at the College in Wellington. For the access codes to the Cochrane library contact cpearson@rnzcgp.org.nz at the College.

'Protected' Quality Assurance Activities[1]

The new HPCA allows health practitioners to apply to the Minister of Health to have their quality assurance activities 'protected'.

Quality assurance activities encompass a wide range of activities and most businesses or organisations use some form of quality assurance in their day to day operations and longer-term planning.

Quality assurance in health is particularly important as it is generally accepted that there is always some risk of an adverse patient outcome in all health care interventions, even when such interventions are performed expertly. Adverse outcomes can also occur as a result of human error, poor quality care or system failure. In health, a quality assurance activity could include clinical audits of the outcomes of treatment, academic studies of the incidence of adverse patient outcomes, peer review activities or systems reviews, to name but a few. Essentially, the term QAA describes the way health practitioners review, assess and monitor their work.

The Health Practitioners Competence Assurance Act 2003 allows the Minister of Health to protect a QAA. In doing this, the Minister of Health is able to protect the confidentiality of information that becomes known solely as a result of such activities, protect the confidentiality of documents brought into existence solely for the purposes of such activities; and give immunity from civil liability to persons who engage in such activities in good faith.

1. http://www.moh.govt.nz/moh.nsf/0/a68075776584ee94cc256bdb007effce/$FILE/HPCANewsletter1.pdf