



network for people working in health care), Russell and colleagues (p 1174) found that

members were able to improve cross-professional contact and share innovation, good practice, and research ideas. Soft networking enables knowledge for evidence based health care to be personalised and made meaningful through informal social interaction, say the authors, and skilled staff can encourage a strong culture of support and reciprocity.

POEM*

Strontium reduces risk of symptomatic vertebral fracture

Question Does strontium ranelate improve clinical outcomes in patients with postmenopausal osteoporosis and at least one vertebral fracture?

Synopsis Strontium ranelate is thought to both increase the formation of new bone and decrease bone resorption. In this double blind, randomised controlled trial postmenopausal women with osteoporosis and at least one vertebral compression fracture were randomly assigned (allocation concealment uncertain) to 2 g strontium powder a day or placebo. The powder could be taken once or twice daily, and follow up consisted of annual radiographs and patients' reports of any acute back pain or fracture. Although 1649 patients were initially recruited, those without follow up radiographs were excluded from the analysis, leaving 1442 (719 receiving strontium, 723 receiving placebo) for the intention to treat analysis. The patients had a mean age of 69 years, a mean body mass index of 26.1, and a mean of 2.2 vertebral fractures at baseline. A total of 1260 completed the planned three year follow up. The study was funded by the drug manufacturer, the French pharmaceutical company Servier, which held the data and conducted all the statistical analyses for the authors. After three years, the risk of symptomatic vertebral fracture, the more important patient oriented outcome, was lower in the treatment group (11.3% v 17.4%; $P < 0.001$; absolute risk reduction = 6.1%; number needed to treat = 17). Strontium treatment also significantly reduced the risk of radiographic vertebral fractures (fractures noted on film but not necessarily apparent to the patient) (20.9% v 32.8%; $P < 0.001$; absolute risk reduction = 10.9%; number needed to treat = 9). There was no significant difference in the risk of non-vertebral fracture (15.6% v 16.9%) and a non-significant trend towards fewer episodes of back pain in the strontium group (17.7% v 21.3%; $P = 0.07$). Bone mineral density increased in the spine, hip, and femoral neck in the strontium group compared with no change or a small decline in the placebo group. Adverse events were generally similar in the two groups, with slightly more diarrhoea in the strontium group (6.1% v 3.6%; $P = 0.02$).

Bottom line Strontium ranelate prevents one symptomatic vertebral fracture for every 17 postmenopausal women with a history of vertebral fracture who take it for three years.

Level of evidence 1b (see www.infoPOEMs.com/levels.html). Individual randomised controlled trials (with narrow confidence interval)

Meunier PJ, Roux C, Seeman E, et al. The effects of strontium ranelate on the risk of vertebral fracture in women with postmenopausal osteoporosis. *N Engl J Med* 2004;350:459-68.

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* Patient-Oriented Evidence that Matters. See editorial (*BMJ* 2002;325:983)

Editor's choice

Can IT lead to radical redesign of health care?

Most of the large sectors of the economy have seen radical reinvention in the past 25 years. Consider air transport: low cost airlines are making bigger profits than traditional airlines. Consider telecommunications: distance is dead, or at least dying, and everybody (apart from me) has a mobile phone. Even higher education has changed, with a threefold increase in young people going to university. Health, in contrast and despite seeming to be in a state of permanent revolution, has not changed so fundamentally. But the perfusion of high quality information technology (IT) into the heart of health care should lead to radical redesign.

One of the characteristics of being in the old world (or paradigm) is that it's almost impossible to imagine the new one. Nevertheless, it's fun to try—and this theme issue on electronic communication and health care provides clues.

The first development is that patients have access to the same information, knowledge, and guidelines as clinicians. This has happened to some degree, but we have much further to go with the mass of patients finding the information, being helped to make sense of it, and most importantly acting on it. Sometimes people will manage their own problems but they will also get help from patients' organisations—often through the web but sometimes in person.

Access to professional services will also be through the web. Again this is beginning with NHS Direct, but soon almost every encounter might start this way, with patients being advised that they don't need care, being referred to patients' organisations, or passed directly to a clinician. Increasingly that clinician may be not a doctor but a nurse or other healthcare worker supported by excellent technology that will provide instant access to knowledge and pathways to manage the patient.

Doctors too will be supported by technology that will feel helpful to them but constantly guide their management of patients. Many consultations will happen via the internet (as is already the case for some doctors), and the patients' electronic biographies (not just records) may contain every last fact about them, including all that they eat and the exercise they take. Sensors placed in their clothing and houses will feed the biographies.

Every step in health care will be recorded, allowing better management of both the patient and the system but also the generation of new knowledge through data mining. Every cost will also be known.

As this theme issue makes clear, the limiting step in moving to the new world is less the technology and much more the human aspects. But good technology will change us and health care.

If you'd like to discuss further the ideas raised in this theme issue, then join our experimental webchat at 11 am London time (British Summer Time) on Thursday 20 May. Go to <http://quest.bmj.com/chat> a few minutes before it starts to register and read the rules.

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