

This is a repository copy of *Randomised, controlled trial of alternating pressure mattresses compared with alternating pressure overlays for the prevention of pressure ulcers:PRESSURE (pressure relieving support surfaces) trial.*

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/1750/>

---

**Article:**

Nixon, J, Cranny, G, Iglesias, C [orcid.org/0000-0002-3426-0930](https://orcid.org/0000-0002-3426-0930) et al. (6 more authors) (2006) Randomised, controlled trial of alternating pressure mattresses compared with alternating pressure overlays for the prevention of pressure ulcers:PRESSURE (pressure relieving support surfaces) trial. *British Medical Journal*. pp. 1413-1415. ISSN 1756-1833

<https://doi.org/10.1136/bmj.38849.478299.7C>

---

**Reuse**

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



## Randomised, controlled trial of alternating pressure mattresses compared with alternating pressure overlays for the prevention of pressure ulcers: PRESSURE (pressure relieving support surfaces) trial

*BMJ* 2006;333;30-  
doi:10.1136/bmj.333.7557.30-b

---

Updated information and services can be found at:  
<http://bmj.com/cgi/content/full/333/7557/30-b>

---

*These include:*

**Rapid responses** You can respond to this article at:  
<http://bmj.com/cgi/eletter-submit/333/7557/30-b>

**Email alerting service** Receive free email alerts when new articles cite this article - sign up in the box at the top right corner of the article

---

### Notes

---

To order reprints of this article go to:  
<http://www.bmjournals.com/cgi/reprintform>

To subscribe to *BMJ* go to:  
<http://bmj.bmjournals.com/subscriptions/subscribe.shtml>

## Summary points

Hip fracture is the most common cause of acute orthopaedic admission in older people

Treatment is generally surgical to replace or repair the broken bone

Mortality is 5-10% after one month and about 30% after one year

Some loss of function is to be expected in most patients

Multidisciplinary rehabilitation is needed for the patient to return home

Ways to reduce the risk of further fracture should be considered

reports of hip protectors, which absorb or spread the energy of a fall, were promising, but recent studies have questioned their effectiveness.<sup>20 21</sup>

## Conclusions

Hip fracture is the most common disabling injury and cause of accidental death in older people. The incidence and the public health and economic consequences of this injury have risen as the population has aged, and this is expected to continue for the foreseeable future.

The prevention and management of hip fractures involves a wide range of disciplines, and most people who sustain the injury require surgery followed by a period of rehabilitation. The complexity of care needed for hip fractures makes the condition a real test and a useful marker of the integration and effectiveness of modern health care.

Competing interests: None declared by MP. AJ received reimbursement of conference expenses and fees for non-promotional lecturing from the manufacturers of various oral bisphosphonates.

- Gullberg B, Johnell O, Kanis JA. World-wide projections for hip fracture. *Osteoporosis Int* 1997;7:407-13.
- Keene GS, Parker MJ, Pryor GA. Mortality and morbidity after hip fracture. *BMJ* 1993;307:1248-50.
- Roche JJW, Wenn RT, Sahota O, Moran CG. Effect of comorbidities and postoperative complications on mortality after hip fracture in elderly people: prospective observational cohort study. *BMJ* 2006;331:1374-6.
- Parker MJ, Handoll HHG. Hip fracture. *Clinical evidence*. BMJ Publishing, 2005.
- Scottish Intercollegiate Guidelines Network (SIGN). *Prevention and management of hip fractures in older people*. SIGN Publication No 56. Edinburgh: SIGN, 2002. [www.sign.ac.uk/guidelines/fulltext/56/index.html](http://www.sign.ac.uk/guidelines/fulltext/56/index.html) (last accessed 6 Jun 2006).
- New Zealand Guidelines Group. *Acute management and immediate rehabilitation after hip fracture amongst people aged 65 years and over*. 2003. [www.nzgg.org.nz/guidelines/dsp\\_guideline\\_popup.cfm?guidelineCatID=32&guidelineID=7](http://www.nzgg.org.nz/guidelines/dsp_guideline_popup.cfm?guidelineCatID=32&guidelineID=7) (last accessed 6 Jun 2006).
- March LM, Chamberlain AC, Cameron ID, Cumming RG, Brnabic AJM, Finnegan TP, et al. How best to fix the broken hip. *Med J Aust* 1999;170:489-94.
- Cameron I, Crotty M, Curry C, Finnegan T, Gillespie L, Gillespie W, et al. Geriatric rehabilitation following fractures in older people: a systematic review. *Health Technol Assess* 2000;4(2):i-iv, 1-111.
- Department of Health. *National service framework for older people*. London: DoH, 2001. [www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT\\_ID=4003066&chk=wg3b90](http://www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4003066&chk=wg3b90) (last accessed 8 Jun 2006).
- Cameron ID, Handoll HHG, Finnegan TP, Madhok R, Langhorne P. Co-ordinated multidisciplinary approaches for inpatient rehabilitation of older patients with proximal femoral fractures. *Cochrane Database Syst Rev* 2001;(3):CD000106.
- Gillespie LD, Gillespie WJ, Cumming R, Lamb SE, Rowe BH. Interventions for preventing falls in the elderly. *Cochrane Database Syst Rev* 2003;(4):CD000340.

- American Geriatrics Society, British Geriatrics Society, American Academy of Orthopaedic Surgeons. *National guidelines for the prevention of falls in older persons*. 2001. <http://www.americangeriatrics.org/products/positionpapers/Falls.pdf> (last accessed 6 Jun 2006).
- National Institute for Health and Clinical Assessment. *Clinical practice guideline for the assessment and prevention of falls in older people*. London: NICE, 2004. [www.nice.org.uk/page.aspx?o=cg021fullguideline](http://www.nice.org.uk/page.aspx?o=cg021fullguideline) (last accessed 6 Jun 2006).
- Chapuy MC, Arlot ME, Delmas PD, Meunier PJ. Effect of calcium and cholecalciferol treatment for 3 years on hip fractures in elderly women. *BMJ* 1994;308:1081-2.
- Avenell A, Gillespie WJ, Gillespie LD, O'Connell DL. Vitamin D and vitamin D analogues for preventing fractures associated with involutional and post-menopausal osteoporosis. *Cochrane Database Syst Rev* 2005;(3):CD000227.
- National Institute for Health and Clinical Excellence. *Bisphosphonates (alendronate, etidronate, risedronate), selective oestrogen receptor modulators (raloxifene) and parathyroid hormone (teriparatide) for the secondary prevention of osteoporotic fragility fractures in postmenopausal women*. London: NICE, 2005. [www.nice.org.uk/pdf/TA087guidance.pdf](http://www.nice.org.uk/pdf/TA087guidance.pdf) (last accessed 6 Jun 2006).
- Boonen S, McClung MR, Eastell R, Fuleihan GE-H, Barton IP, Delmas P. Safety and efficacy of risedronate in reducing fracture risk in osteoporotic women aged 80 and older: implications for use of antiresorptive agents in the old and oldest old. *J Am Geriatr Soc* 2004;52:1836-9.
- Writing Group for the Women's Health Initiative Investigators. Risks and benefits of estrogen plus progestin in healthy postmenopausal women. Principal results from the Women's health initiative randomized controlled trial. *JAMA* 2002;288:321-33.
- Cummings SR, Eckert S, Krueger KA, Grady D, Powles TJ, Cauley JA, et al. The effect of raloxifene on risk of breast cancer in postmenopausal women: results from the MORE randomized trial. Multiple outcomes of raloxifene evaluation. *JAMA* 1999;281:2189-97.
- Parker MJ, Gillespie LD, Gillespie WJ. Hip protectors for preventing hip fractures in older people. *Cochrane Database Syst Rev* 2005;(3):CD001255.
- Parker MJ, Gillespie L, Gillespie W. Hip protectors for preventing hip fractures in the elderly: the evolution of a systematic review of randomised controlled trials. *BMJ* 2006;332:571-3.

## Corrections and clarifications

### Minerva

Minerva apologises for nearly launching a health scare. As many readers have pointed out, she slipped up somehow in her assertion that long term use of antiepileptic drugs is associated with an increased risk of cancers, particularly in women (*BMJ* 2006;332:1282, 27 May). The source article (*Neurology* 2006;66:1318-24) quite clearly refers to a risk of fractures, not cancer.

### Selective serotonin reuptake inhibitors (SSRIs) and suicide in adults: meta-analysis of drug company data from placebo controlled, randomised controlled trials submitted to the MHRA's safety review

The authors of this article published last year, David Gunnell and colleagues, have alerted us to an error in the abridged version of their paper (*BMJ* 2005;330:385-8). In the table, the correct estimate for the pooled odds ratio for self harm from the bayesian random effects meta-analysis for non-fatal self harm in relation to use of selective serotonin reuptake inhibitors (excluding paroxetine) is "1.57 (credible interval 0.99 to 2.55)"—not 1.51 (0.95 to 2.49). This matches the values given in the abstract and in the results section of the paper.

### Randomised, controlled trial of alternating pressure mattresses compared with alternating pressure overlays for the prevention of pressure ulcers: PRESSURE (pressure relieving support surfaces) trial

An editorial misunderstanding during the proof stage led us to inflate some values in this paper by Jane Nixon and colleagues (*BMJ* 2006;332:1413-5, 17 Jun). In table 4 of the full version on [bmj.com](http://bmj.com) (table 2 of the abridged version), the haemoglobin levels on admission or preoperatively should be 0.89 (0.82 to 0.97) [not 8.9, 8.2 to 9.7], and the corresponding P value should be 0.01 [not 0.1].