Trial for a non pharmacological treatment (Hip protectors)
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Hip fracture is the commonest reason for admission of elderly people to an acute orthopaedic ward. In 1990, an estimated 1.7 million hip fractures occurred worldwide. The incidence is rising. A hip fracture is generally the result of a fall.
Hip protectors consist of padding worn around the hip to reduce the impact of a fall. Many websites now advertise hip protectors and claim that they reduce the risk of fractures. However, adherence can be low and the protectors can be difficult to wear correctly.

Are hip protectors effective? The best way to assess the effectiveness of any health care intervention is by a randomised controlled trial. The results of randomised controlled trials can be collated by meta-analysis to produce more precise estimates of effect sizes. The Cochrane Library is an extensive electronic library of systematic reviews and meta-analyses of health care interventions. Any researcher considering a trial of *any* intervention should first identify whether previous trials and/or a meta-analysis have been performed.

There is a systematic review and meta-analysis of hip protectors on the Cochrane Library [1]. This review identified 15 trials. Pooling data from 11 trials in nursing or residential home settings found a marginally significant reduction in the risk of hip fracture incidence. Analysis of data from three community trials found no effect. An update of the review incorporating subsequent trials found that hip protectors are ineffective [2]. A recent trial has confirmed this conclusion [3].

In summary, hip protectors appear ineffective in preventing hip fracture. However, hip protectors come in a wide range of designs and some may be more effective than others. Further ongoing research will provide more answers.

Refs
[1] Parker MJ, Gillespie WJ, Gillespie LD Hip protectors for preventing hip fracture in older people (review) Cochrane Library 2007
[2] Parker MJ, Gillespie WJ, Gillespie LD Effectiveness of hip protectors for preventing hip fractures in elderly people: systematic review BMJ doi:10.1136/bm.38753.375323.7C
[3] Keil DP, Magaziner J, Zimmerman S et al JAMA 2007;298:413-422