

The use of hip protectors for prevention of hip fractures

EDITORIAL

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Education before discharge and regular telephone follow-up after discharge resulted in a compliance rate of 60% for the use of hip protectors in hip fracture patients.¹ The hip protector is an attractive means of preventing hip fractures in high-risk patients. However, its use is hampered by low compliance. Even in nursing home settings, less than a quarter of the residents complied with using hip protectors 24 hours a day. The more dependent and cognitively impaired persons were more likely to be compliant.²

The efficacy of hip protectors in preventing hip fractures is uncertain. One meta-analysis showed significant protective effects against hip fractures in nursing homes.³ Nonetheless, another meta-analysis concluded that hip protectors had no significant effects in community-dwelling older people, and were only marginally effective against hip fractures in the nursing home setting.⁴

Randomised controlled trials of hip protectors in nursing homes have to be interpreted with caution because of the common use of cluster randomisation in group assignment, i.e. rather than individuals, all residents in a given nursing home were randomised to use or not to use hip protectors. Variations in case mix and quality of nursing home care may have confounded the results. A randomised trial overcame this problem by randomly assigning nursing homes to place the hip protector on either the left or right side of the subjects. By comparing the incidence of hip fractures on the side of hip protector, efficacy could be more reliably evaluated.⁵ After 20 months of follow-up, the trial was terminated due to lack of efficacy, even though the compliance rate was over 70%. This carefully conducted trial raised serious doubts about the efficacy of hip protectors in hip-fracture prevention, at least for the soft type of hip protectors. It is understandable that soft type may have slightly better compliance than the hard type, especially in the long term.⁶ Nonetheless, the gain in compliance may have been offset by the potential loss in efficacy.

Although the hip protector appears an attractive means of preventing hip fractures in high-risk individuals, there are uncertainties about its efficacy in preventing hip fractures. The search is still on for hip protectors that are both efficacious and tolerated by frail older people.

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