Hip protectors compared to no hip protectors for preventing hip fractures in older people

Patient or population: preventing hip fractures in older people

Settings: institutional/residences Intervention: hip protectors Comparison: no hip protectors

Outcomes	Anticipated absolute effects* (95% CI)		Relative	№ of	Quality of the
	Risk with no hip protectors	Risk with hip protectors	effect (95% CI)	participants (Studies)	evidence (GRADE)
Hip fractures at 1 year assessed with: older people living in the community follow up: range 6-28 months	Low		RR 0.83 (0.54 to	1426 (5 RCTs)	ФФОО
	20 per 1000 ½	17 per 1000 (11 to 26)	1.29)	(5 KUIS)	LOW ²³
	High				
	60 per 1000	50 per 1000 (32 to 77)			
Pelvic fractures follow up: 6-24 months	Low		RR 1.16	7273 (6 RCTs)	⊕⊕⊕○ MODERATE 24
	2 per 1000	2 per 1000 (1 to 4)	(0.65 to 2.04)		
	High				
	14 per 1000	16 per 1000 (9 to 29)			
Falls per person year; rate ratio follow up: 12-24 months	Moderate		Rate	11275	$\Theta\Theta\Theta$
	3 per 1000	3 per 1000 (3 to 3)	1.02 (0.9 to 1.16)	(16 RCTs)	MODERATE ²
Quality of Life (scale from 0 to 1, optimal) assessed with: EuroQol -5D (mobility, self-care, usual activities, pain/discomfort, anxiety/ depression) follow up: 6 months	The mean quality of Life (scale from 0 to 1, optimal) in the control group was 0.7 to 0.75	The mean quality of Life (scale from 0 to 1, optimal) in the intervention group was 0.13 lower (0.23 lower to 0.03 lower)	-	235 (1 RCT)	⊕⊕⊖⊖ LOW 5§
Mortality	Moderate		RR 0.96 (0.84 to	1749 (4 BCTa)	$\Theta\Theta$
	120 per 1000	115 per 1000 (101 to 132)	1.1)	(4 RCTs)	LOW 23
Adherence assessed with: (wearing hip protectors) follow up: range 6-28 months	The proportion of people who adhered to the hip protector intervention ranged from 24% to 80%			9000 (19 RCTs)	⊕⊕⊕⊖ MODERATE ^I

^{*}The risk in the intervention group (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI).

CI: Confidence interval; RR: Risk ratio; OR: Odds ratio;

GRADE Working Group grades of evidence

High quality: We are very confident that the true effect lies close to that of the estimate of the effect

Moderate quality: We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different

Low quality: Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect

Very low quality: We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect

- 1. Baseline risks reported in large observational studies
- 2. Unclear or no blinding of participants, investigators and outcome assessors, and loss to follow-up ranging from 0 to 56%.
- 3. Few events and wide confidence intervals including appreciable benefit and harm (also in absolute effects)
- 4. Few events, and wide confidence intervals, but absolute effects small in low risk group., therefore not downgraded.
- 5. Unclear blinding of participants, investigators and assessors, and baseline score was significantly lower in intervention group.
- 6. Few participants and includes potential for appreciable benefit or little to no effect.
- 7. Adherence reported with a variety of measures; considerable heterogeneity across studies and imprecise results.