Can reducing medicines decrease falls in older patients living in the community?

**Bottom line**

In older patients, stopping medicines reduces falls. The strongest evidence is for psychotropics—antipsychotics, hypnotics (benzodiazepine and nonbenzodiazepine) and antidepressants—followed by anticonvulsants, thiazide diuretics, and nonsteroidal anti-inflammatory drugs (NSAIDs).

**Evidence summary**

Half of 80 year olds and a third of patients >65 years fall each year. The CDC, a Cochrane review, and the American and British Geriatrics Societies all recommend reducing medications to decrease falls.

The strongest evidence in the Cochrane review for stopping psychotropic medications is found in 2 RCTs. One reduced the risk of falls by two-thirds (relative hazard 0.34; 95% CI, 0.16–0.74) in 93 community-living patients aged ≥65 by tapering benzodiazepines, major tranquilizers, and antidepressants over 14 weeks. Patients were from 17 general practices in New Zealand followed over 44 weeks. Another randomized trial of 849 patients in 20 Australian outpatient general practices aimed to reduce benzodiazepines, while also reducing thiazide diuretics and NSAIDs. There was a 39% reduction in falls (adjusted OR 0.61; 95% CI, 0.41–0.91) at 12 months.

The American and British Geriatrics Societies Clinical Practice Guideline for prevention of falls in older persons cited 9 randomized trials that included medication management as part of a multifactorial intervention. Medication effect could not be separated out in any of the studies, but the guidelines stress reduction or withdrawal of medications for all older people.

The American Geriatrics Society’s revised Beers Criteria cited 16 studies (14 observational studies and 2 systematic reviews that included RCTs) in making recommendations to avoid anticonvulsants, antipsychotics, benzodiazepines, nonbenzodiazepine hypnotics (eszopiclone, zaleplon, zolpidem), tricyclic antidepressants, and selective serotonin reuptake inhibitors. One of the 2 reviews (consisting of 1 RCT and 28 observational studies) found that benzodiazepines, antidepressants, and antipsychotics all increase falls. Psychotropic medications had the highest level of evidence for causing falls. Antiepileptics and drugs that lower blood pressure were more weakly associated with falls. The other review found that benzodiazepines, zaleplon, and zolpidem all significantly increased sway. Heterogeneity in reporting of both falls and medications in the observational studies presented a challenge. More RCTs are needed to establish the causality of medications for falls.

**REFERENCES**


