

Osteoporotic hip fractures: how to minimise the risk

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Falls and hip fractures are not an inevitable part of old age.¹ Meeting key goals of healthy ageing e.g. remaining mobile and maintaining relationships, requires proactive falls and fracture prevention.¹ Approximately more than 40 Australians break their hip every day, with >90% undergoing surgery.² Hip fractures can have a devastating impact on an individual's life.³ In Australia, following a hip fracture:⁴

- 5% die in hospital
- > 10% newly discharged to an aged care facility
- > 50% are disabled for at least 12 months after injury
- 15-20% die 1 year after discharge.

Osteoporosis, characterised by compromised bone strength, increases the risk of suffering a fracture following only minimal trauma.⁵ Almost 90% of hip fractures are the result of a minimal trauma (low impact) fall.⁶ Therefore, identifying those at highest risk of hip fracture i.e those with prior minimal trauma fractures, with risk factors for osteoporosis and risk factors for falls should be a priority.⁷

Large randomised trials demonstrate that specific anti-osteoporosis medications, with calcium and vitamin D supplements as required, can reduce the relative risk of hip fractures by 40%.⁸⁻¹³ However, only 9% of people admitted with hip fracture are on anti-osteoporosis medication, and 36% are on calcium and/or vitamin D.⁴ In addition, the risk of a future fracture is increased 2.5-fold following a hip fracture.⁷ Yet even after a hip fracture the provision of secondary preventative care after fracture, such as osteoporosis assessment and treatment, and falls reduction interventions, is not routinely delivered,^{4,7} despite evidence that anti-osteoporosis treatment is effective.¹⁴

References

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