

Position Statement

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Prevention of Hip Fractures

This Position Statement was developed as an educational tool based on the opinion of the authors. It is not a product of a systematic review. Readers are encouraged to consider the information presented and reach their own conclusions.

Hip fracture disease, one of the most serious consequences of osteoporosis, is occurring at an epidemic rate in North America. More than 306,000 Americans fracture a hip each year. This number is increasing, and by the year 2050, there will be an estimated 650,000 hip fractures annually; nearly 1,800 hip fractures a day. The current annual hospital cost is more than \$8 billion, and increasing, at a time when control of health care costs is especially vital. Ninety percent of hip fracture patients are 65 years of age or older.

For most patients and their families, a hip fracture is a devastating event, resulting in a host of potential medical problems, such as increased mortality, reduced mobility, and, for many, the inability to live independently. Hospitalization for the surgical treatment of hip fractures is routine. More than forty percent of all hospital stays are due to fractures, with hip fractures accounting for more than any other musculoskeletal injury.

The American Academy of Orthopaedic Surgeons (AAOS) believes that the growing epidemic of hip fractures requires a comprehensive national response, stressing education, prevention and research.

Public education programs must raise the level of awareness concerning this serious public health problem. Also, these programs should focus attention on currently available techniques for the prevention of hip fractures.

Organized prevention programs must involve both health care providers and the public. Emphasis should be directed toward reducing the incidence of severity of osteoporosis, as well as reducing the frequency and consequences of falls among the elderly.

Advanced osteoporosis can often be prevented by sufficient calcium and vitamin D intake beginning in childhood, appropriate weight-bearing exercise throughout life, avoidance of smoking and excessive drinking of alcoholic beverages, and, when medically indicated, use of calcitonin or bisphosphonates. Post-menopausal women should exercise caution when using estrogen replacement therapy and discuss with their physicians the risks and benefits of this treatment option. Alternatives to estrogen include isoflavones derived from soy based products. Falls may be due to avoidable side effects of medication, to correctable gait and balance disorders, to impaired vision or to environmental hazards. Using crutches, a cane or a walker as a walking aid will frequently provide improved balance, and in so doing, help prevent falls. Protective padding might reduce the risk of fracture for individuals who are at risk of falling.

Orthopaedic surgeons recognize that efforts to reduce the number of hip fractures in America will be successful only with collaboration and cooperation with other allied medical specialties, including primary health care providers. The AAOS has joined with other groups, such as the National Osteoporosis Foundation, to create a Position Statement on Osteoporosis, as well as provide educational materials and support of programs to reduce the frequency of hip and other fractures.

Focused research is required to determine the most effective ways of preventing osteoporosis and fracture causing falls. Research is also needed to determine the optimal treatment protocols for hip fractures. Emphasis must be

placed on maximizing functional outcome, avoiding medical and surgical complications, and developing systems and protocols for effective rehabilitation.

The AAOS supports the efforts of the U.S. Centers for Disease Control and Prevention to stimulate a greater understanding of hip fracture, and urges allocation of further governmental and private support for research and education targeted at reducing the burden posed by hip fractures, the costliest of musculoskeletal injuries. This investment will help significantly to reduce the financial burden of health care for all Americans.

This statement is endorsed by the National Institute on Aging and the National Osteoporosis Foundation.

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