

Reduce falls and fractures among the elderly

Dr Hitendra K. Doshi, a specialist orthopaedic and trauma surgeon from Mount Alvernia Hospital, explains orthogeriatrics and its importance



Explain orthogeriatrics, and why it is important among the elderly.

Orthogeriatrics is the diagnostic, holistic and preventive management of bone- and joint-related issues among elderly patients in their 50s and beyond. The two main orthopaedic concerns are degenerative joint disease (or osteoarthritis) and fragility fractures.

Osteoarthritis is caused by chronic wear and tear of the joints, in particular the knees and hips. It manifests over time as swelling, pain when bearing weight, and restriction in movement. These degenerative symptoms may start to occur among those in their early 30s or 40s, and become more severe in their 50s or 60s as the condition deteriorates over the years.

Fragility fractures occur after trivial injuries and minor falls due to brittle bones. The elderly are more vulnerable to falls and their brittle bones may easily crack, break or even shatter from sudden muscle pulls, or after a minor fall. Their brittle bones are due to underlying osteoporosis, low calcium and low vitamin D blood levels.

How is osteoarthritis managed?

Osteoarthritis management depends on the stage of the disease, and the individual's signs and symptoms. While the end point of management involves knee replacement surgery for severe cases, there are various ways to manage the condition in its early stages.

Weight reduction, lifestyle changes, physiotherapy, medication may help. Viscosupplementation injections of hyaluronic acid into the knee joint and the use of an offloader knee brace are also effective non-surgical forms of management. If diagnosed early, these preventive measures can slow down the rate of deterioration.

How are fragility fractures treated, and what can be done to reduce such instances?

Common fractures in the elderly after a minor injury often involve the hip, wrist and spine. Most fragility fractures may

require surgical fixation, but complex fractures of the joint may require joint replacement surgery.

Upper limb fractures may be managed non-surgically. However, lower limb fractures are best managed surgically to restore early mobility and prevent complications such as bed sores, urine infection and chest infection. Such complications can contribute to a poor outcome and in some cases, even death. Timely surgery when indicated can prevent these complications.

Fall prevention education, together with early diagnosis and treatment of osteoporosis, are crucial in reducing the incidence of fragility fractures.

What are the differences in the rehabilitation of an elective knee replacement surgery and a fragility fracture surgery?

In elective knee surgery, I assess the patient in advance to minimise potential complications. I also routinely advise patients to go for targeted muscle strengthening pre-surgery for smoother rehabilitation and recovery post-operatively.

Meanwhile, fragility fractures are usually treated as emergency cases where there is higher risk of potential complications, especially if there is a delay in surgery. Consequently, this may prolong the rehabilitation process. The key to successfully managing fragility fractures, in particular hip fractures, is early and timely surgery and mobilisation.

What advice do you have for ageing gracefully?

Early diagnosis, holistic management and practising preventive measures are key to ageing gracefully. From an orthopaedic perspective, this means ensuring mobility and painless joint function throughout one's silver and golden years. These will contribute significantly to mental and emotional well-being.

Above: Early diagnosis, holistic management and practising preventive measures are key to aging gracefully.

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