

Vertebroplasty - Advanced treatment of Osteoporotic Vertebral Fractures

Vertebral compression fracture is one of the most common forms of bone fracture as a result of osteoporosis. In Asia, some 200 new cases of osteoporotic fracture were reported annually in every ten thousand people, with a female to male ratio of 2:1. Post-menopausal women are more susceptible to osteoporosis and thus vertebral fracture.

Vertebral compression fractures can lead to back pain, difficulty in actions and even paralysis. About 80% of the cases can be treated conservatively by anti-osteoporosis medications, analgesics, and wearing of brace. Surgical treatment may be needed in other cases.

Vertebroplasty is a new treatment for vertebral compression fracture leading to severe back pain despite conservative treatment. Two needles are inserted to the fractured vertebral body percutaneously under local anaesthesia with X-ray guidance. "Bone cement" (polymethylmethacrylate) is then injected into the vertebral body. The cement will solidify in 15 minutes and strengthen support to the fractured vertebral body. Most of the patients could be discharged the next day after the treatment.

The Department of Orthopaedics and Traumatology of the University of Hong Kong started to perform vertebroplasty since 2000. So far 25 cases were handled using the treatment with promising results. Over 80% of the patients reflected that the treatment brought substantial improvement in back pain as a result of their vertebral fractures.