Therapeutic effects of conservative treatment with 2-week bed rest for osteoporotic vertebral fractures
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As part of conservative treatment, a brief initial period of bed rest is as safe as no rest and has an excellent effect,” explains Professor Toru Funayama.

The study was conducted in two hospitals that treated patients with spinal fracture from osteoporosis—one with a standard procedure of strict bed rest for the first 2 weeks and the other with a standard procedure encouraging walking rehabilitation as soon as possible depending on pain tolerance. The researchers compared the number of patients who required surgery, radiological changes (like the occurrence of non-union of the bone, additional damage to the bone, or increased spinal kyphotic deformity), and changes in ability to perform daily activities between the patient groups.

The study found that bed rest may help those who need it most. As Professor Funayama says, "Individuals whose MR imaging indicated a poor prognosis benefitted the most from this form of conservative treatment during initial stages.”

The structure of the individual bones and the spine as a whole contribute to its ability to withstand large and varying loads during daily activities. Bed rest may allow the structure of the weakened bone to gain some stability. Because the period of initial bed rest is limited, countereffects such as muscle wasting from disuse are reversible. Potential radiological changes that can arise from structural instability, like vertebral collapse or spinal deformity, may also be avoided.

The research team's findings on the benefits of initial bed rest make an important contribution to maximize treatment options for a common complication of osteoporosis.

Provided by University of Tsukuba

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