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IMPACT OF POSTURAL DEFORMITIES AND SPINAL MOBILITY ON QUALITY OF LIFE OF POSTMENOPAUSAL WOMEN.

The objective of this study, from the Department of Orthopedic Surgery, Akita University School of Medicine, Japan, was to evaluate the impact of postural deformities and spinal mobility on quality of life (QOL) in patients with spinal osteoporosis.

A total of 157 postmenopausal women aged over 60 years with osteoporosis were divided into five groups according to their postural deformities:

- Round back (RB, n=41),
- Hollow round back (HRB, n=33),
- Whole kyphosis (WK, n=40),
- Lower acute kyphosis (LAK, n=18), and
- Normal posture (NP, n=25).

QOL was evaluated using a quality of life questionnaire, called the Japanese Osteoporosis QOL Questionnaire (JOQOL). This questionnaire contains six domains, with higher scores indicating higher levels of QOL. The number of vertebral fractures, thoracic kyphosis and lumbar lordosis angles, and spinal range of motion (ROM) during maximum flexion and extension were also measured with radiographs.

Total QOL scores in all groups with postural deformity were significantly lower than those in the normal posture group.

All the groups with postural deformities, but not the normal posture group, showed significant positive correlations between total QOL score and spinal ROM.

Total QOL score showed a significant correlation with age, number of vertebral fractures, lumbar lordosis angle, and spinal ROM in a total of 157 patients. However, multiple regression analysis revealed that spinal ROM best correlated with total QOL score.

The authors concluded that QOL in patients with osteoporosis was impaired by postural deformities and that spinal mobility has a strong effect on QOL in these patients.

Reference:

Miyakoshi N, Itoi E, Kobayashi M, Kodama H. Impact of postural deformities and spinal mobility on quality of life in postmenopausal osteoporosis. *Osteoporos Int.* 2003; 14:1007-12.