

Yoga for Osteoporosis: Results from a pilot study

As the lifespan of individuals increase, many problems associated with aging have started surfacing including osteoporosis and osteopenia. It is said that 25% of women over the age of 70 years in the US are estimated to have osteoporosis (OP). Because of osteoporosis, they are susceptible to fractures at the slightest of falls. The previous articles have discussed the causes of both these disorders and how yoga would work on bone strengthening. However, modern science would require 'evidence' that practice of *yogāsanas* does indeed strengthen the bones.

Loren Fishman, who has been a student of Guruji Iyengar utilizes yoga in his clinical practice has done a pilot study on yoga for osteoporosis. This paper was published in the journal Topics in Geriatric Rehabilitation, in 2009.

Patient selection:

Patients with osteoporosis or osteopenia were enrolled for the study after scanning the hip and spine by the DEXA scan. If the T-scale value was below -1.0 for spine or hip. They were tested to rule out any other health condition.

'Treatment' with āsanas:

The patients were taught 10 *āsana* with appropriate modifications as per their condition. The poses taught were the *Trikonāsana*, *Adho Mukha Śvānāsana* and *Urdhva Mukha Śvānāsana*, *Setu Bandhāsana* and *Urdhva Dhanurāsana*, *Jānu Śirsāsana* and *Paschimottānāsana*, *Nāvāsana*, *Supta Pādangusthāsana*, and *Marichyāsana*, *Matsyendrāsana*, and *Jathara Parivarthānāsana*.

Results:

A total of 117 patients entered the study of which 87 people with osteoporosis and 30 with evidence only of osteopenia.

Only 11 patients continued practicing for 2 years and 7 served as controls for the same period. A DEXA scan was repeated after two years. The mean

BMD of the 11 patients who did yoga has improved well beyond that of the controls.

The patients doing 10 minutes

of yoga daily showed an increase in spine BMD equivalent to 0.563 units on the T-scale; their hip BMD increased to 0.867 units while in the controls the BMD had deteriorated and was -0.12 and -0.07 for spine and hip, respectively during the same time frame. .

Although the number of patients in the study was small, it clearly indicated that regular practice of yoga improved their spinal T-scores by an average of 0.69 T-score units and their hip T-scores by 0.87 T-score units in 2 years. Five patients with osteopenia were reclassified as normal; 2 patients with

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2 patients with osteoporosis became osteopenic.

osteoporosis became osteopenic.

Although a pilot study, this study shows that the bone mineral density does increase after the practice of yoga!

Reference: Topics in Geriatric Rehabilitation 25: 244-250, 2009.