## **Yoga in Rheumatic Conditions**

Yoga (Sanskrit: union, of body, mind, and soul) is one of the six great philosophies of India. Ayurveda has included Yoga as a part of ideal lifestyle. Yoga is classified as mind-body medicine (enhance capacity of mind to affect bodily functions and symptoms) and has comprehensive potential for development of physical, mental, and social health. It needs to be practiced in 8 stages (Ashtang – eight-fold – Yoga) one after another for all round development of personality. These 8 stages are Yama (self-restraint, moral attitudes towards society), Niyama (self-regimen, good individual observances), Asana (postures), Pranayama (control of breathing and thoughts), Pratyahar (conscious withdrawal from senses), Dharana (self-absorption – concentration), Dhyana (meditation) and Samadhi (trans).

Various methods of Yoga having common goal of Samadhi, are broadly classified into 4 streams viz. Karmayoga (work, service), Bhaktiyoga (devotion, worship), Dyananayoga (philosophy, wisdom) and Rajayoga (mind control, meditation). Hathayoga (Ha: sun, Tha: moon; balance of two qualities) is a part of Rajayoga and controls mind through Asana, Pranayama, Mudra (voluntary action) and Bandh (voluntary action to generate positive pressure). Yoga also undertakes cleansing techniques (like panchakarma in Ayurveda) without use of any drugs.

A typical Yoga session (usually one hour) consists of warm up exercises (Surya Namaskar) followed by 8-10 asanas with intermittent rest, pranayama, meditation, and Aum recitation one after other. Proper breathing techniques are emphasized throughout the session. Yoga needs to be practiced everyday as a way of life and a good teacher is required at least for initial training.

Most asanas have a dynamic (assumption of posture and coming back) and static (maintenance of posture for a length of time) component. Asanas are not mere stretching exercises. It is an effortless assumption of a stable and comfortable posture as well as mind without any unpleasant sensation of pain. Most Asanas are corrective in nature and are useful in reconditioning of the musculoskeletal system by slow and smooth movements. Some Asanas are for relaxation (e.g., Shavasana) or meditation (e.g., Padmasana). Yoga is advised for various musculoskeletal disorders. International Association of Yoga Therapists (www.iayt.org) advocates Yoga for arthritis and allied conditions. Yoga and Tai-chi (Chinese counterpart of Yoga combining deep breathing and relaxation with slow and gentle movements while maintaining good posture) sessions form a part of training programs for lupus patients.

Mechanical actions of Yoga, such as changes in cell shape due to mechanical and fluid pressure, can have physiologic effects at cellular level and might alter joint function<sup>1</sup>. Yoga increases muscle strength and flexibility. It helps alleviating anxiety and depression. It down-regulates hypothalamic-pituitary-adrenal axis, suppresses sympathetic nervous system, and increases vagal tone. IL-6 and C-reactive protein levels are lower in regular Yoga practitioners<sup>2</sup>. Reduction in stress related inflammatory responses is a beneficial effect of Yoga in inflammatory rheumatic conditions. Clinical studies including few good quality ones, indicate utility of Yoga in RA, OA (knee, hand), low back pain, and carpal tunnel syndrome. Yoga has positive effects on pain and pain-related disability<sup>3</sup>. Two studies in fibromyalgia showed significant reduction in pain and anxiety.

Incorrectly performed asanas can cause problems in several ways though no adverse events are reported. Some of the asanas such as Padmasana and Vajrasana (extreme knee flexion), can be difficult to perform and may be deleterious in cases of knee osteoarthritis.

## **References:**

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