**Rheumatoid Arthritis (RA)** is a chronic (lifelong) autoimmune inflammatory disease. It occurs when the immune system, which normally defends the body from invading organisms, turns its attack against the membrane lining the joints. It can occur in the young (juvenile RA) as well as all age groups. RA symptoms may include intermittent or persistent joint pain which can be severe, swelling, stiffness, and loss of physical function in areas, such as the hands, wrists, shoulders, knees, and feet. Over time, these symptoms can lead to irreversible joint deformity and damage. For many people, periods of relatively mild disease activity are punctuated by flares, or times of heightened disease activity. In others, symptoms are constant.

**References:**


Alves AC, *et al.* (2013), Low-level laser therapy in different stages of rheumatoid arthritis: a histological study,

*Laser Med. Sci. 28:529-36,*
Brosseau’s study showed patients with RA, relative to a separate control group, LLLT reduced pain by 70% relative to placebo and reduced morning stiffness by 27.5 min (95% CI -52.0 to -2.9), and increased tip to palm flexibility by 1.3 cm (95% CI -1.7 to -0.8). They concluded LLLT should be considered for short term relief of pain and morning stiffness in RA, particularly since it has few side effects.

Khozeimeh’s study concluded that LLLT has a long-term promising effect on reducing inflammation severity of TMJ similar to betamethasone in earlier stages [of RA].

Alves’s study revealed histological analyses of articular tissue related to the RA inflammatory process and observed that LLLT both at **early** and **late RA progression stages** significantly improved mononuclear inflammatory cells, exudate protein, medullary hemorrhage, hyperemia, necrosis, distribution of fibrocartilage, and chondroblasts and osteoblasts compared to the RA group (p<0.05). We can conclude that LLLT is able to modulate inflammatory response both in early as well as in late progression stages of RA.

*The Brosseau, Khozeimeh, and Alves studies as well as many others in the scientific literature provide reliable scientific evidence that LLLT has a beneficial effect in those with Rheumatoid Arthritis.*