

Achilles Tendinopathy and Lumbopelvic Stability

Stasinopoulos Dimitrios*

Assistant Professor, Physiotherapy, Physiotherapy Program, Department of Health Sciences, School of Sciences, Nicosia, Cyprus

Chronic achillestendinopathy is a common clinical condition that is managed by physical therapists [1,2]. This condition is common among athletes and non-athletes. Achillestendinopathy is characterized by the absence of inflammatory cells and prostaglandin and the increased presence of fibroblasts and disorganized collagen [3]. Therefore, this condition is not inflammatory as physicians thought but it is degenerative. Extrinsic factors such as inappropriate footwear, sport technique, training errors, and intrinsic factors such as muscle weakness and/or inflexibility, and malalignment are the main factors that might lead to achillestendinopathy [4]. Functional activities such as heel raise can cause pain in this condition [5].

A wide array of physiotherapy techniques has been recommended for the treatment/rehabilitation of Achilles tendinopathy such as electrotherapeutic (ultrasound, ESWT, laser, iontophoresis) and non-electrotherapeutic modalities (exercise programmes, soft tissue manipulation, and acupuncture) [6,7]. In our days, eccentric training is the most common physiotherapy treatment for patients with Achilles tendinopathy. Eccentric training with dorsiflexion was effective for patients with mid-portion Achilles tendinopathy [8-12], but eccentric training without dorsiflexion shown positive effects in patients with insertional Achilles tendinopathy [13].

Eccentric training is not enough for patients with Achilles tendinopathy [14,15]. It is thought that patients with Achilles tendinopathy have a loss of lumbopelvic control and this loss has the potential to alter load distribution on the lower limb kinetic chain [5]. Our research team believes that this is an important component of the rehabilitation programme and exercises such as single leg bridging in supine and four point prone bridging exercises can be used to improve lumbo-pelvic control. However, there is lack of scientific evidence to link a lack of lumbopelvic control with Achilles tendinopathy. Thus, future well-designed control studies are needed to support the above belief. Finally, the same lack of lumbopelvic control should be existed in patients with chronic patellar tendinopathy but also research in this area is needed to confirm our belief.

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*Corresponding author: Stasinopoulos Dimitrios, Assistant Professor, Physiotherapy, Physiotherapy Program, Dept. of Health Sciences, School of Sciences, 6- Diogenes Str. Engomi, P.O. Box 22006, 1516, Nicosia, Cyprus, Tel: +35722713044; Fax: +35722713013; E-mail: D.Stasinopoulos@euc.ac.cy

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