



# ΠΑΝΕΠΙΣΤΗΜΙΟ ΔΥΤΙΚΗΣ ΑΤΤΙΚΗΣ

ΣΧΟΛΗ ΕΠΙΣΤΗΜΩΝ ΥΓΕΙΑΣ ΚΑΙ ΠΡΟΝΟΙΑΣ

Τμήμα Φυσικοθεραπείας

## PhD ABSTRACT

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## TITLE

‘The effect of Cyriax method on the treatment of lateral elbow tendinopathy’

Lateral elbow tendinopathy (LET) is the most common chronic disease of the elbow joint (Bisset & Vicenzino, 2015), affecting almost 1-3% of the general (Shiri & Viikari-Juntura, 2011; Coombes et al., 2009). Its incidence increases with age and is highest in the 35-60 age group (Shiri & Viikari-Juntura, 2011; Ahmad et al., 2013).

Extensor carpi radialis brevis’ tendon is the most common structure affected by LET (Stasinopoulos & Johnson, 2006). There is a continuous cycle of minor injuries and constant attempts to repair the damage, causing in progressive degeneration (Bhabra et al., 2016; Vaquero-Picado et al., 2016). Consequently, a domino effect of changes occurs in the peripheral nervous system neurons, ultimately resulting to the sensitization of the central nervous system (Coombes et al., 2009; Ackermann, 2015).

Treatment for LET includes a wide variety of techniques, due to the complexity of the condition. Scientific evidence on the efficacy of the various techniques is of poor quality (Bateman et al., 2021), which hampers the choice of the right therapeutic plan (Coombes et al., 2009; Ackermann, 2015).

The Cyriax method was empirically developed by James Cyriax as a therapeutic approach to connective tissue damage (Chaves et al., 2017). It is an inseparable combination of deep transverse friction (DTF) and Mill’s manipulation (Cyriax & Cyriax, 1983; Stasinopoulos & Johnson, 2004). This approach aims to the passive mobilization of soft tissues, preparing them to endure load. The regenerative process is boosted and the mobility of the damaged tissue is restored through pain reduction (Chaves et al., 2017; Stasinopoulos & Johnson, 2004).

Despite the fact that clinical experience supports the use of Cyriax method on LET, the results of systematic reviews show that it is not superior to other approaches indicated for this condition (Brosseau et al., 2002; Joseph et al., 2012; Lowe et al., 2014). At the same time, there is no consensus on how to apply the method, which leads to a lack of standardization of the relative protocols (Chaves et al., 2017). In addition, great diversity is observed in the methodological design, the instruments and methods of evaluating the variables (pain, functionality) (Chaves et al., 2017).

The disagreement on DTF procedures and the awareness that physiotherapists' performance may be affected by the lack of understanding of Cyriax's conclusions motivated the development of this thesis: The primary aim is to analyze the application parameters of the Cyriax method, as well as its effect on the symptoms of LET, by documenting how physiotherapists in Greece use the method.

Moreover, and in line with the latest findings (Bateman et al., 2022) a psychometric evaluation of LET will be included in this thesis. Kinesiophobia is an outcome measure that should be considered, as it is affected by LET (Bateman et al, 2022; Stasinopoulos, 2022; Giannikou et al., 2023).

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