The Anatomy of the Forearm Extensor Muscles and the Fascia in the Lateral Aspect of the Elbow Joint Complex

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Abstract

PURPOSE: This study aimed to address the lack of detailed information on the fascia, and the potentially diverse attachments of the Extensor Carpi Radialis Brevis and Extensor Digitroum Communis on the lateral epicondyle. METHODS: Twenty cadavers were dissected by layers consisting of the skin, subcutaneous fat, superficial fascia, deep fascia, and muscles. RESULTS/CONCLUSIONS: The separable attachment of the Extensor Capri Radialis Brevis and Extensor Digitorum Communis on the lateral epicondyle is best described as the Common Extensor Origin. This Common Extensor Origin is formed by the Extensor Digitorum Communis at its superficial portion (approximately 65-75% of the Common Extensor Origin thickness) and by the Extensor Carpi Radialis Brevis at its deepest quarter (approximately 25-35% of the Common Extensor Origin thickness). Distal to the radiocapitellar joint, the proximal bellies of the Extensor Carpi Radialis Brevis and Extensor Digitorum Communis appear tightly attached to the deep fascia. The attachments of lateral intermuscular septum and superficial fascia in the lateral elbow appear to be tight. CLINICAL RELEVANCE: Cadaveric findings on the location of the Extensor Carpi Radialis Brevis and Extensor Carpi Radialis Brevis at the lateral elbow may potentially guide the sonologists during diagnostic scan and surgeons during operation in localizing pathological changes within the Common Extensor Origin in the elbow.

REFERENCE

Dones VCIII, Milanese S, Worth D, Grimmer-Somers K. The Anatomy of the Forearm Extensor Muscles and the Fascia in the Lateral Aspect of the Elbow Joint Complex. Anatom Physiol 3:117. doi: 10.4172/2161-0940.1000117, 2013.

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