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Attachments of the Distal Oblique Membrane and Distal Oblique Bundle to the Distal Radioulnar Joint Capsule and Septum of Extensor Tendon Sheath

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Abstract : The aim of this study was to clarify the attachments of the distal oblique membrane (DOM) and distal oblique bundle (DOB) of the interosseous membrane of the forearm. The distal oblique membrane was investigated in the 21 specimens of 11 Korean cadavers. The muscles in the forearms were removed to observe the DOB. The DOB was found in 13 of 21 specimens (61.9 %). The DOB was attached to the distal radioulnar joint capsule and the septum between the tendons of the extensor digiti minimi (EDM) and extensor carpi ulnaris (ECU) as well as the radius and ulna. In the cases that the DOB was absent, a part of the DOM extended to the distal radioulnar joint capsule and the septum between the tendons of the EDM and ECU, as well as the radius and ulna in all specimens (100%). The DOM, including the DOB, was arranged obliquely in the anteroposterior direction, whereas the intermediate part of the interosseous membrane was arranged in the same plane between the radius and ulna. The extension of the DOM and DOB to the wrist region may stabilize the distal radioulnar joint during supination and pronation. These data will be useful when performing reconstructive surgeries.

Keywords : distal oblique membrane, distal oblique bundle, distal radioulnar joint capsule, interosseous membrane
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