Computed Tomographic Arthrography of the Normal Dromedary Camel Carpus.

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ABSTRACT

The aim of this prospective cadaveric study was to provide a detailed computed tomographic (CT) reference of the carpal joint in healthy dromedary camels. Twelve forelimbs of six apparently healthy camels were used. Computed tomographic imaging of 12 normal cadaveric camel carpal joints was performed before and after intra-articular administration of iodinated contrast medium. Transverse CT images were reconstructed in dorsal and parasagittal planes. The six carpal bones, the radial trochlea, and the proximal articular surface of the metacarpal bones were clearly visible on CT images with the bone setting window. Radiocarpal, carpometacarpal, transverse intercarpal, medial and lateral palmer, intercarpal, middle intercarpal, accessory carpoulnar and medial and lateral collateral ligaments, carpal canal, joint capsule, and the extensor and flexor tendons were identified on CT images with the softtissue setting window. Postcontrast CT images provided better delineation of intercarpal ligaments, the capsular compartments and recesses. Results indicated that the osseous and the clinically important soft tissue structures of the dromedary camel carpal joint could be identified using CT and CT arthrography. The CT data of this study will serve as a basis for diagnosis of carpal problems in camels.

Keywords: Computed tomography, arthrography, camel, carpus.