

UTILIZATION OF DIAGNOSTIC IMAGING BY DOCTORS OF CHIROPRACTIC IN AN ELITE SPORTS MEDICINE CLINIC

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OBJECTIVE: The purpose of this study is to describe the use of diagnostic imaging over one year by Doctors of Chiropractic in an elite sports medicine clinic.

METHODS: Data collection of the imaging studies was obtained for both internally performed and externally ordered imaging studies. This was achieved by performing an analysis of usage logs for imaging modalities performed or ordered by Doctors of Chiropractic who are full time employees of the clinic. External studies were assessed via analysis of imaging prescription records for advanced imaging ordered at outside facilities. Internal studies were assessed through analysis of clinic imaging metrics for imaging studies that included digital radiography and musculoskeletal ultrasound via computer tracking software. The statistics compiled included all studies for radiography, ultrasonography, computed tomography, and magnetic resonance imaging.

RESULTS: During the one year period observed in this study Chiropractic Physicians ordered 308 radiographic series, 284 musculoskeletal ultrasounds, 33 MRI's, and 2 CT's. It should be noted that a radiographic series implies that a minimum of 2 views were taken on the region of interest, with up to 7 views depending on the area of interest and suspected pathology. The most common regions studied by digital radiography were foot and ankle (72), wrist and hand (42), and elbow (37). The most common regions studied with musculoskeletal ultrasonography were shoulder (77), knee (55) and foot and ankle (45). The most common regions studied with magnetic resonance imaging (MRI) were knee (11), and lumbar spine (4), shoulder(4), foot and ankle(4). Only 2 computed tomography studies were ordered, one of the lumbar spine and the other of the head.

CONCLUSIONS: Chiropractic Sports Physicians practicing in an elite sports medicine setting utilize a number of different imaging modalities as diagnostic and patient management tools. Musculoskeletal ultrasonography, digital and computed radiography are the most commonly used modalities, followed by Magnetic Resonance Imaging, and Computed Tomography. There were regional preferences for the type of imaging modality ordered. The most common region of study by imaging modality were the foot and ankle using digital radiology, the shoulder using musculoskeletal ultrasonography, the knee MRI.