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DIAGNOSTIC IMAGING IN A DIRECT-ACCESS SPORTS PHYSICAL THERAPY CLINIC: A 2-YEAR RETROSPECTIVE PRACTICE ANALYSIS

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ABSTRACT

Background: While advanced diagnostic imaging is a large contributor to the growth in health care costs, direct-access to physical therapy is associated with decreased rates of diagnostic imaging. No study has systematically evaluated with evidence-based criteria the appropriateness of advanced diagnostic imaging, including magnetic resonance imaging (MRI), when ordered by physical therapists. The primary purpose of this study was to describe the appropriateness of magnetic resonance imaging (MRI) or magnetic resonance arthrogram (MRA) exams ordered by physical therapists in a direct-access sports physical therapy clinic.

Study Design: Retrospective observational study of practice.

Hypothesis: Greater than 80% of advanced diagnostic imaging orders would have an American College of Radiology (ACR) Appropriateness Criteria rating of greater than 6, indicating an imaging order that is usually appropriate.

Methods: A 2-year retrospective analysis identified 108 MRI/MRA examination orders from four physical therapists. A board-certified radiologist determined the appropriateness of each order based on ACR appropriateness criteria. The principal investigator and co-investigator radiologist assessed agreement between the clinical diagnosis and MRI/surgical findings.

Results: Knee (31%) and shoulder (25%) injuries were the most common. Overall, 55% of injuries were acute. The mean ACR rating was 7.7; scores from six to nine have been considered appropriate orders and higher ratings are better. The percentage of orders complying with ACR appropriateness criteria was 83.2%. Physical therapist's clinical diagnosis was confirmed by MRI/MRA findings in 64.8% of cases and was confirmed by surgical findings in 90% of cases.

Conclusions: Physical therapists providing musculoskeletal primary care in a direct-access sports physical therapy clinic appropriately ordered advanced diagnostic imaging in over 80% of cases. Future research should prospectively compare physical therapist appropriateness and utilization to other groups of providers and explore the effects of physical therapist imaging privileging on outcomes.

Level of Evidence: Diagnosis, Level 3

Keywords: Diagnostic imaging, direct access, sports physical therapy

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The opinions or assertions contained herein are the private views of the authors and are not to be construed as official or reflecting the views of the United States Army or Department of Defense.

The study protocol was approved by the Institutional Review Board at Keller Army Community Hospital, West Point, NY (Protocol #15-024).

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