

ORIGINAL RESEARCH

ACETABULAR LABRAL TEARS: DIAGNOSTIC ACCURACY OF CLINICAL EXAMINATION BY A PHYSICAL THERAPIST, ORTHOPAEDIC SURGEON, AND ORTHOPAEDIC RESIDENTS

Barbara A. Springer, PT, PhD, OCS, SCS¹
Norman W. Gill, PT, DSc, OCS, FAAOMPT²
Brett A. Freedman, MD³
Amy E. Ross, MD¹
Matthew A. Javernick, MD⁴
Kevin P. Murphy, MD⁵

ABSTRACT

Background. Previous studies have shown military physical therapists (PT) to have comparable clinical diagnostic accuracy (CDA) and interobserver agreement to orthopaedic surgeons (OS). However, no studies have examined hip pathology or used intraoperative findings as the reference standard for diagnosis.

Objective. To compare the CDA of physical examination findings among a PT, an OS, and two surgical orthopaedic residents (ORs) for hip labral tears.

Methods. Thirty-six patients (15 males, 21 females) aged 18-47 (mean + SD, 31.4 + 8.1 years) with 37 symptomatic hips were enrolled in a prospective study and underwent a standardized clinical examination followed by hip arthroscopy. A PT, an OS, and two ORs independently performed history and examinations with the emphasis of diagnosis on the results of six special tests.

Results. Thirty-two of 37 individuals (86%) had labral tears to the hip at arthroscopy. Analysis of agreement between clinical diagnosis and intra-operative findings of

a labral tear produced a CDA of 85.3% (29/34 correct) for the PT, 84.4% (27/32 correct) for the OS, and 80.0% (24/30 correct) for ORs. No significant difference in CDA occurred in comparing the PT, OS, and ORs.

Conclusions. Using arthroscopy as the reference standard, hip labral tears were clinically suspected with 80-85% accuracy. The clinical diagnostic accuracy of the PT, OS, and ORs was high with no significant difference between examiners. In this study, an experienced PT, an OS, and two ORs demonstrated similarly high diagnostic skills.

Key Words: diagnosis, physical exam, hip joint, labral tear, direct access.

CORRESPONDENCE

Barbara A. Springer, PT, PhD
2 Greenlane Court
Potomac, MD 20854.
Email: Barbara.Springer@na.amedd.army.mil.
Telephone: 202-782-6371
Fax: 202-782-3764

DISCLAIMER

The views expressed in this manuscript are those of the authors and do not reflect the official policy of the Department of Army, Department of Defense, or U.S. Government. All authors are employees of the United States government. This work was prepared as part of their official duties and as such, there is no copyright to be transferred.

¹ Walter Reed Army Medical Center
Washington, D.C

² Brooke Army Medical Center
Fort Sam Houston, TX

³ Emory University
Atlanta, GA

⁴ Evan U.S. Army Hospital
Fort Carson, CO

⁵ Heekin Orthopaedic Specialists
Jacksonville, FL