ABSTRACT

Background: The ligamentum teres (LT) continues to be a structure of debate and interest. Previously thought of as a vestigial structure, an awareness of LT pathology and its potential importance has increased with the expansion of hip arthroscopy.

Purpose: To provide a comprehensive literature synthesis on the LT and provide clinicians with the most current research regarding the LT and its anatomical features, functional relevance, prevalence of injury, risk factors for injury, clinical presentation, and treatment for pathology.

Methods: A systematic literature search was conducted using Medline/PubMed, CINAHL/EBSCO, and Cochrane/Wiley databases/platforms using the following search terms: ligament, ligament teres, hip, femur, femoral head, round ligament.

Results: This search yielded 1284 articles of which 44 met the inclusion/exclusion criteria and contributed to this manuscript. Information on the LT was summarized into the following areas: anatomy, function, injury prevalence, risk factors, mechanism of injury, duration of symptoms, clinical presentation (symptoms, range of motion, functional limitations, special testing), imaging, and treatment.

Conclusions: The results of this review supported the following: 1) the LT has a function in restraining hip rotation range of motion; 2) the prevalence of LT pathology in any given population may be largely dependent on the severity of bony deformity (either femoroacetabular impingement (FAI) or dysplasia) and activity level; 3) older age and acetabular bony deformity (either FAI or dysplasia) are risk factors for generalized LT pathology; 4) unique signs and symptoms are difficult to identify because LT pathology rarely occurs in isolation and is likely the end-stage consequence of other hip pathology; 5) the presence of LT pathology may negatively affect an individual's ability to function; and 6) surgical debridement is recommend for pain relief of partial LT tears with reconstruction possible for complete LT tears when complaints of instability are noted.

Level of Evidence: 3

Keywords: Hip, hip arthroscopy, instability, pain