The Most-Cited Articles on De Quervain's Tenosynovitis: A Contemporary Reading List

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INTRODUCTION: Bibliometric analysis is a powerful tool to survey the landscape of literature on a specific topic and identify publication trends. De Quervain's Tenosynovitis is a common wrist pathology that was first described in 1895 by Fritz de Quervain. The pathophysiology involves attritional forces that cause thickening of the extensor tendons and extensor retinaculum of the first dorsal compartment. To our knowledge we report the first bibliometric analysis in the literature on this condition.

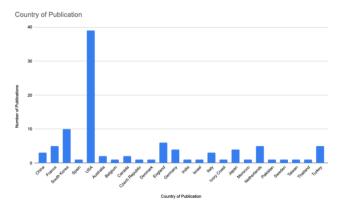
METHODS: The Journal Citation Report within the Web of Science database was utilized to identify articles relating to De Quervain's Tenosynovitis. The following search terms were utilized: de Quervain's tendinosis, de Quervain's tenosynovitis, and de Quervain syndrome. Web of Science Research Categories were restricted to orthopedics, sports science, and surgery. The articles were then ranked by number of citations. The top 100 articles of all time were isolated and analyzed. The articles were analyzed for factors including publication year, journal impact factor (Journal Citations Report Database), first author gender, first author country and institution. Descriptive and statistical analysis were performed.

RESULTS SECTION: The details on most cited articles of all time on De Quervain's Tenosynovitis were collected. Information on the top 10 articles are provided in Table 1. 2009, 2013, 2018 were the most productive years (Fig1). The United States published the most articles overall (n=38), followed by South Korea (n=10) and England (n=6) (Fig2). The Journal of Hand Surgery published the most articles of all time (n=20) (Table 1). A weak positive correlation between impact factor and citation frequency was found (R=.351). 59% of articles had a male first author, 20% female, and 21% first author gender could not be determined. The Mayo Clinic and Harvard University published the most articles. A weak positive correlation between impact factor and country of publication was also found (R=.242). No significant correlation between citation frequency and country of publication was found.

DISCUSSION: The objective of this study was to identify and analyze the 100 most impactful articles of all time on De Quervain's Tenosynovitis in the English-language to create a targeted reading list for the orthopedic hand surgeon. The current bibliometric analysis highlights the most influential literature on De Quervain's Tenosynovitis, a common condition with abundant research. Positive correlations between journal impact factor and both citation frequency and country of publication were found.

SIGNIFICANCE/CLINICAL RELEVANCE: The most influential articles relate to the psychological impact of the disease, incidence of De Quervain's in athletes, nonoperative vs operative treatment, and anatomical studies.

Authors	Article Title	Year	Times Cited,	Journal	Journal Impact Factor	Affiliations
Ring, David; Kadzielski, John; Fabian, Lauren; Zusakowski, David; Malhotra, Leah R.; Jupiter, Jesse B.	Self-reported upper extremity health status correlates with depression	2006	178	JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME	6.558	Harvard University; Massachusetts General Hospital;
Das De, Sauroca Vocaseau, Ana-Maria; Ring, David C.	Contribution of Cinescehobia and Catastrophic Thinking to Upper-Extremity-Specific Disability	2013	124	JOURNAL OF BONE AND JOINT SURGERY-AMERICAN VOLUME	6.558	Harvard University; Massachusetts General Hospital
Rettig, AC	Athletic injuries of the wrist and hand - Part II: Overuse injuries of the wrist and traumatic injuries to the hand	2004	109	AMERICAN JOURNAL OF SPORTS MEDICINE	7.01	Methodist Sports Med
Sinan Axxi	Comparison of nonsurgical treatment measures for de	2002	75	JOURNAL OF HAND SURGERY- AMERICAN VOLUME	2.342	Guyon Hantaposis Estity University
Nickel, Maarten C.; Lindenhovius, Anneluuk L. C.; Watson, Jeffrey B.; Vranceanu, Ana-Maria; Ring, David	Correlation of DASH and QuickDASH With Measures of Psychological Distress	2009	74	JOURNAL OF HAND SURGERY- AMERICAN VOLUME	2.342	Harvard University; Massachusetts General Hospital; Harvard University; Massachusetts General Hospital; University of Amsterdam; Academic Medical Center Amsterdam
Wolf, Jennifer Moriatis; Sturdivant, Rodney X.; Owens, Brett D.	Incidence of de Quervain's Tenosynovitis in a Young, Active Population	2009	64	JOURNAL OF HAND SURGERY- AMERICAN VOLUME	2.342	University of Colorado System; University of Colorado Anschutz Medical Campus; University of Colorado Denver; USA Department of Defense; USA Army; USA Military Academy; William Beaumont Army Medical Center
Sawaizumi, Takuya; Nanno, Mitsuhiko; Ito, Hiromoto	De Quervain's disease: efficacy of intra-sheath triamcinolone injection	2007	61	INTERNATIONAL ORTHOPAEDICS	3.479	Nippon Medical School
McDermott, James D.; Ilyas, Asif M.; Nazarian, Levon N.; Leinberry, Charles F.	Ultrasound-guided Injections for de Quervain's Tenosynovitis	2012	57	CLINICAL ORTHOPAEDICS AND RELATED RESEARCH	4.837	Jefferson University; Rothman Institute; Jefferson University
Bystrom, S; Hall, C; Welander, T; Kilbom, A	Clinical disorders and pressure pain threshold of the forearm and hand among automobile assembly line workers	1995	57	JOURNAL OF HAND SURGERY- BRITISH AND EUROPEAN VOLUME	0.844	NATL INST OCCUPAT HLTH
Titchener, Andrew G.; White, Jonathan J. E.; Hinchliffe, Sally R.; Tambe, Amol A.; Hubbard, Richard B.; Clark, David I.	Comorbidities in rotator cuff disease: a case-control study	2014	55	JOURNAL OF SHOULDER AND ELBOW SURGERY	3.507	University of Nottingham; University of Nottingham; Nottingham University Hospital NHS Trust; Nottingham City Hospital; University of Nottingham



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Journal	Number of Articles	Impact Factor
JOURNAL OF HAND SURGERY-AMERICAN VOLUME	20	2.342
JOURNAL OF HAND SURGERY-EUROPEAN VOLUME	6	2.206
INTERNATIONAL ORTHOPAEDICS	5	3.479
CLINICAL <u>ORTHOPAEDICS</u> AND RELATED RESEARCH	5	4.837
ARCHIVES OF PHYSICAL MEDICINE AND		100
REHABILITATION	5	4.06
JOURNAL OF HAND THERAPY	5	1.908