

# World Journal of *Orthopedics*

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**ORIGINAL ARTICLE****Basic Study**

- 418 Association of vitamin D and knee osteoarthritis in younger individuals  
*Tripathy SK, Gantaguru A, Nanda SN, Velagada S, Srinivasan A, Mangaraj M*

**Retrospective Study**

- 426 Mortality following combined fractures of the hip and proximal humerus  
*Haque A, Singh HP*
- 431 Early clinical outcome and learning curve following unilateral primary total knee arthroplasty after introduction of a novel total knee arthroplasty system  
*Omari A, Troelsen A, Husted H, Nielsen CS, Gromov K*

**Randomized Controlled Trial**

- 442 Highly cross-linked versus conventional polyethylene inserts in total hip arthroplasty, a five-year Roentgen stereophotogrammetric analysis randomised controlled trial  
*van Loon J, Hoornenborg D, Sierevelt I, Opdam KT, Kerkhoffs GM, Haverkamp D*

**CASE REPORT**

- 453 Long-term effect of intrathecal baclofen treatment on bone health and body composition after spinal cord injury: A case matched report  
*Ifon DE, Ghatas MP, Davis JC, Khalil RE, Adler RA, Gorgey AS*
- 465 Conversion to reverse shoulder arthroplasty fifty-one years after shoulder arthrodesis: A case report  
*Dogger MN, Bommel AFV, Alta TDW, van Noort A*

**LETTER TO THE EDITOR**

- 473 Trochanteric bursitis information on the internet; can we trust the information presented?  
*Tyrrell R, Kelly M, Kennedy C*

**ABOUT COVER**

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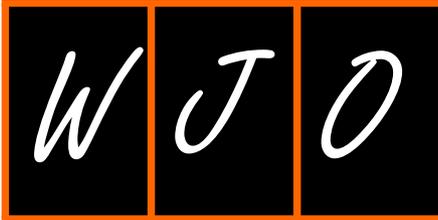
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## Trochanteric bursitis information on the internet; can we trust the information presented?

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### Abstract

Trochanteric bursitis is one of the most common causes of lateral hip pain in adults. The prevalence of unilateral trochanteric bursitis is 15.0% in women and 8.5% in men. Access to internet based information has increased dramatically and health related information is now one of the most popular searches in online activity, despite this the quality of information can vary. The objective of this paper is to examine the quality and readability of internet based information of trochanteric bursitis. Overall, we have found a high variability among not only the quality but also the readability of information published. Websites that appeared first on each search engine for trochanteric bursitis did not necessarily score better, demonstrating the importance of providing patients with high quality resources. Future articles should use more critical appraisal tools in order to provide the reader with more high quality and readable information.

**Key Words:** Internet; Quality; Readability; DISCERN; *Journal of American Medical Association*; Flesh Reading Ease

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**Core Tip:** From this study, we note that there is a large variance in the information available on the internet, health care workers should be aware of this, should educate patient's about the large variance of quality of medical information on the internet and should direct patients who are looking for further information to the relevant websites.

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## TO THE EDITOR

The internet's usage has massively increased in the last number of years with over 85% of the American population having access to it<sup>[1]</sup>. In this modern age with the rise of the internet, we face an ever growing population of self-educated patients. This presents a new challenge for doctors as the quality of information on the internet is variable and could lead to misinformed patients.

We recently reviewed the quality of internet-based information of a commonly encountered hip pathology: Trochanteric bursitis. We used this search term to look at the first 50 websites from the top five search engines. A total of 107 websites were analysed after removing duplicates and inaccessible sites. We used three quality scoring systems: The DISCERN scoring system, the *Journal of American Medical Association (JAMA)* and HON code certification<sup>[2-4]</sup>. The readability of each website was also assessed using the Flesh Reading Ease (FRE) score and the Flesh Kincaid grade level.

When analysing sites about Trochanteric bursitis, the mean DISCERN score was 49.3 (SD 13.7), *JAMA* was 1 (SD 1.39). The websites with the highest DISCERN and *JAMA* scores were the Academic and Physician led websites which showed a significant difference in the quality when compared to commercial or discussion/social media websites ( $P < 0.001$ ). A stark contrast was also seen in the readability of each website with the commercial/social media websites being significantly easier to read with mean FRE score being 57 (SD 11.3) and FKGL score being 7.6 (SD 1.7) when compared to the academic or physician led websites which had a significant lower readability ( $P < 0.001$ ).

Notably only 14 of the 107 websites looked at had HON code certifications and these were the academic or physician led websites. We noticed that there was a correlation between increased *JAMA* and DISCERN scores and sites with HON code certifications therefore leading us to believe that sites with HON code certification were of a higher quality.

Amante *et al*<sup>[5]</sup> demonstrated that people experiencing trouble accessing health care are more likely obtain health information from the Internet. This is particularly worrying when you look at the results of our study as patients who chose non-academic and non-physician led websites as their source of information are more likely to get lower quality information.

In conclusion, we propose that surgeons and clinicians recommend a select number of websites to that are of high quality and also have a high readability in order for patients who are interested be able to expand their understanding of their condition with high quality resources.

## REFERENCES

- 1 Internet usage in the United States. [Cited 2019 November 22]. Available from: <https://www.statista.com/topics/2237/internet-usage-in-the-united-states/>
- 2 Silberg WM, Lundberg GD, Musacchio RA. Assessing, controlling, and assuring the quality of medical information on the Internet: Caveant lector et viewer--Let the reader and viewer beware. *JAMA* 1997; **277**: 1244-1245 [PMID: 9103351 DOI: 10.1001/jama.277.15.1244]
- 3 Charnock D, Shepperd S, Needham G, Gann R. DISCERN: an instrument for judging the quality of written consumer health information on treatment choices. *J Epidemiol Community Health* 1999; **53**: 105-111 [PMID: 10396471 DOI: 10.1136/jech.53.2.105]
- 4 Fahy E, Hardikar R, Fox A, Mackay S. Quality of patient health information on the Internet: reviewing a complex and evolving landscape. *Australas Med J* 2014; **7**: 24-28 [PMID: 24567763 DOI: 10.4066/AMJ.2014.1900]
- 5 Amante DJ, Hogan TP, Pagoto SL, English TM, Lapane KL. Access to care and use of the Internet to search for health information: results from the US National Health Interview Survey. *J Med Internet Res* 2015; **17**: e106 [PMID: 25925943 DOI: 10.2196/jmir.4126]



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