

Doctor YouTube: A Quality Analysis Of Medical Information Videos On The Video Platform YouTube On Ankle Sprain

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Introduction/Purpose: The video portal YouTube has evolved from pure entertainment to professional and semi-professional video tutorials and medical video channels in the recent past. As a result, YouTube today is a source of information that is widely used by patients and relatives. Ankle sprains are one of the most common musculoskeletal injuries, this study was designed to analyze the quality of informational videos available on YouTube and to identify potential hazards as well as content errors.

Methods: In July 2016, YouTube was searched for the terms "ankle sprain", "high ankle sprain", "ankle pain" and "ankle pain distortion". The analysis was limited to the first 5 result pages for each search term. Only English and German videos were included. The videos were found by 2 independent evaluators (MZ, SP) using a multi-dimensional score checklist for the sections anatomy, risk factors and symptoms (max 8 pts), biomechanics (max 3 pts), imaging (max 2 pts), clinical examination (max 6 pts), treatment (max 5 pts), rehabilitation measures (max 2 pts) and prevention (max 2 pts) with a maximum scores per contribution of 31 pts evaluated.

Results: The mean score of the video quality was 11.5 ± 4.5 pts. Distribution of points by subgroup: anatomy, risk factors and symptoms 3.7 ± 1.4 , biomechanics 1.8 ± 1.2 , imaging 0.9 ± 0.8 , clinical examination 1.3 ± 1.2 , treatment 2 ± 1.3 , rehabilitation 1.1 ± 0.9 , prevention 0.6 ± 1 .

No evaluated contribution achieved "very good" Quality Assessment Score of 25-31 pts, one video was rated "good" with 21-26 pts, 2 videos were "satisfactory" (20-16 pts), 14 videos "sufficient" (15-10 pts). 7 videos were rated as "insufficient" (9-4 pts). One clip (2.5 pts) was rated as a promotional video.

A slight correlation between views by videos and score ($r = 0.11$) and a small correlation between the total score and Likes occurred ($r = 0.15$).

Conclusion: Patients watching online video tutorials on ankle injuries are seeking valid information. YouTube gives an extensive video footage of low quality. The defective and incorrect information analyzed by us must be corrected by medical advice. Furthermore, the presented investigation shows an average to bad quality so that the introduction of a seal of approval by the AOFAS for digital content, based on an evidence-based quality control should be discussed in the future.

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