ORIGINAL ARTICLE

European Archives of Medical Research

DOI: 10.14744/eamr.2025.02042
Eur Arch Med Res 2026;42(3):213-221

Evaluation of The Quality and Reliability of Youtube Videos on Anterior and Posterior Ankle Impingement Syndrome

Semih Yas,[1] Tayfun Ozel,[2] Mehmet Ali Tokgoz,[3] Secdegul Coskun Yas,[4] Ahmet Yildirim[5]

[1]Department of Orthopedics and Traumatology, Health Sciences University Dr. Abdurrahman Yurtaslan Ankara Oncology Training and Resarch Hospital Ankara, Türkiye
[2]Department of Orthopedics and Traumatology, Ankara Training and Research Hospital, Ankara, Türkiye
[3]Department of Orthopedics and Traumatology, Gazi University Faculty of Medicine, Ankara, Türkiye
[4]Department of Emergency Medicine, Gazi University Faculty of Medicine, Ankara, Türkiye
[5]Department of Orthopedics and Traumatology, Konya City Hospital, Konya, Türkiye

ABSTRACT

Objective: YouTube is frequently used by patients and physicians for information. Ankle impingement syndrome (AIS) is a condition that affects both the anterior and posterior parts of the ankle joint. To the best of our knowledge, there is no study evaluating the quality of YouTube videos in AIS.

Materials and Methods: YouTube videos on anterior and posterior AIS were evaluated and compared by two European Foot and Ankle Society member orthopedic surgeons using the Journal of American Medical Association (JAMA), Quality Criteria for Consumer Health Information (DISCERN), and Global Quality Score (GQS). In addition, a new score, the AIS Specific Score, was used to evaluate the videos in this study.

Results: Fifty videos about anterior AIS and 43 videos about posterior AIS were evaluated. The mean duration of videos related to anterior AIS was 354.70 s (±314.28) and the mean number of views was 27,166.08 (±54,898.69). The mean duration of videos related to posterior AIS was 1594 s (±424.94) and the mean number of views was 15,309.89 (±47,916.02). When evaluating the quality of video content using scoring systems, videos related to anterior AIS have higher average JAMA, GQS, and DISCERN scores than those related to posterior AIS. However, this difference is only statistically significant for the DISCERN score (p=0.045).

Conclusion: The quality and reliability of YouTube videos on AIS are insufficient to meet the educational needs of patients or healthcare providers. These findings highlight the necessity for producing accurate, evidence-based educational videos and underscore the potential role of orthopedic societies and clinicians in creating standardized, high-quality online resources.

Keywords: Ankle impingement syndrome, Os trigonum, YouTube

Cite this article as: Yas S, Ozel T, Tokgoz MT, Yas Coskun S, Yildirim A. Evaluation of The Quality and Reliability of Youtube Videos on Anterior and Posterior Ankle Impingement Syndrome. Eur Arch Med Res 2026;42(3):213-221.

Address for correspondence: Semih Yas. Department of Orthopedics and Traumatology, Health Sciences University Dr. Abdurrahman Yurtaslan Ankara Oncology Training and Resarch Hospital Ankara, Türkiye

E-mail: drsemihyas@gmail.com **ORCID ID:** 0000-0001-7823-3400

Submitted: 03.10.2025 **Revised:** 06.12.2025 **Accepted:** 19.12.2025 **Available Online:** 18.09.2026

European Archives of Medical Research – Available online at www.eurarchmedres.org

INTRODUCTION

The most reliable way to access accurate information in the field of health is of course to consult a doctor. However, the widespread and ease of use of the internet leads people to obtain information over the internet. One study found that 75% of participants had searched for health information online at least once in their lives.[1] With the rise of social media, many patients now rely on online sources for health information, often even before consulting their doctor. Yet, it's important to realize that not all online health information is reliable or accurate, and trusting these sources can sometimes do more harm than good.[2]

One of the important sources from which patients seek information is YouTube. With the growing interest in information presented in video format, content creators producing health-related information have also shifted their focus to this platform. The number of YouTube members, which has billions of users, continues to grow steadily.[3]

Ankle impingement syndrome (AIS) is one of the major causes of ankle pain. It is characterized by pain that occurs with recurrent excessive dorsiflexion and plantar flexion. While it is often identified in athletes and dancers, this condition can also be observed in normal individuals.[4] It can have either a soft tissue or bony origin.[4] Different classifications are used to define the location of the impingement in the diagnosis of AIS. The most commonly used classifications are anterior AIS and posterior AIS.[5]

There are numerous publications in the literature that evaluate the quality of YouTube video content, many of which are relevant to almost every area of orthopedics. Examples of these include rotator cuff tear,[6] Bankart lesion,[7] meniscus injury,[8] anterior cruciate ligament injury,[9] talus osteochondral lesions,[10] and pes planus.[11]

To the best of our knowledge, there has been no study evaluating the quality of YouTube videos related to AIS. The purpose of this study is to assess and compare the quality and adequacy of YouTube videos on anterior and posterior AIS. The hypothesis of this study was that the quality of YouTube videos would not be sufficient in anterior and posterior AIS.

MATERIALS AND METHODS

On January 14, 2024, using Google Chrome version 120.0.6099.71 (Official Build) (arm64), searched YouTube for the terms "anterior ankle impingement," "posterior ankle impingement," and "os trigonum" after clearing cache and cookies. Fifty-seven videos related to anterior ankle impingement and 51 videos related to posterior ankle impingement and os trigonum were evaluated from the three search results. Only videos with sufficient audio and video quality and in the English language were included in the study. Videos that have the same content, are not in English, or have poor audio and visual quality are excluded as criteria for the study. The study included 50 videos for the anterior ankle impingement group and 43 videos for the posterior ankle impingement group (Fig. 1).

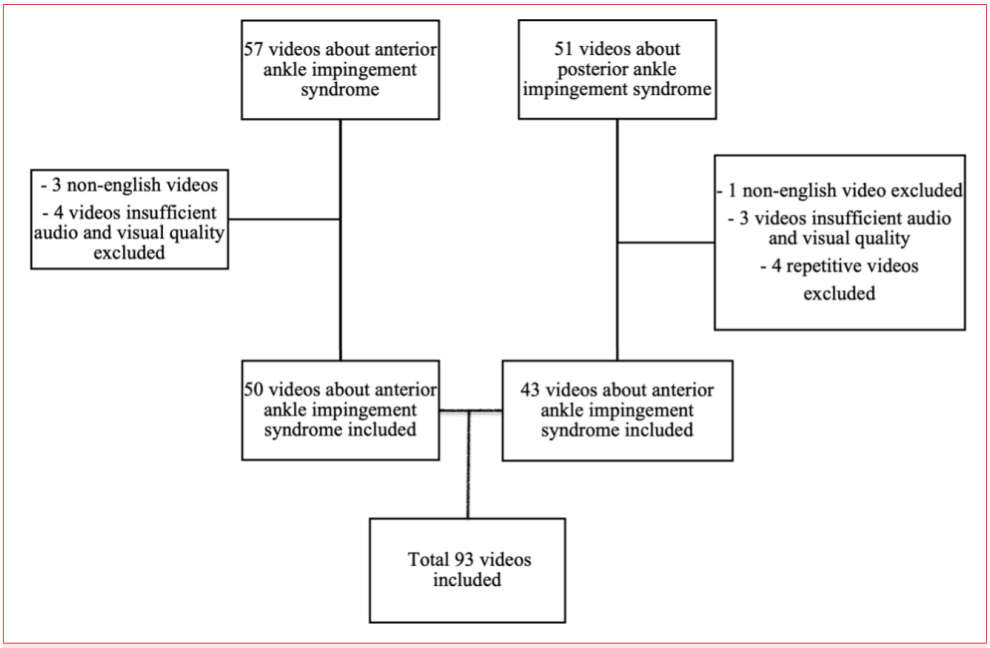

Figure 1. Flowchart of videos included in the study.

The names of the videos, their duration in seconds, the source that uploaded the videos, their content, the number of views, the time elapsed since they were uploaded, the number of likes and dislikes, the view rate (views/day), the likes rate (like×100/[like+dislike]), and the video power index (VPI) (view rate×like rate/100) were evaluated. The sources uploading the videos were classified as doctors, physiotherapists, academics, medical sources, personal trainers, patients, and advertisers. The academic source included universities and research groups. Medical source was content uploaded by health websites. The video content was categorized into subgroups, including exercise videos, disease-specific information, patient experiences, surgical techniques, conservative treatment modalities, and advertising videos.

To ensure the objectivity of video content evaluations, the Journal of American Medical Association (JAMA), the Global Quality Score (GQS), Quality Criteria for Consumer Health Information (DISCERN), and the AIS Specific Score (AISSS) were utilized.

The JAMA score is a system for evaluating the accuracy and reliability of online sources. A total score of four indicates high reliability, while a score of zero indicates low reliability. This scoring system is frequently used as a tool for evaluating the reliability of online sources in the literature. Each criterion is awarded one point if met: (1) Authorship, (2) citation, (3) currency, and (4) explanation. A review of the literature shows that this scoring system is often used as a tool for evaluating the reliability of online sources[6,12] (Table 1).

The GQS is a scoring system that rates the quality of content on a scale of 1–5[13] (Table 1).

DISCERN score is a rating system developed by Charnock et al.[14] It consists of 16 questions, each rated on a scale of 1–5. The score can range from a minimum of 16 to a maximum of 80. The videos were categorized based on their quality using the DISCERN scoring system. The categories include excellent quality (63–80 points), good quality (51–62 points), fair quality (39–50 points), poor quality (27–38 points), and very poor quality (16–26 points)[6] (Table 2).

When evaluating the content of videos related to AIS, we found that there is no specific scoring system for this topic in the literature. Therefore, we used the AISSS, which we created in accordance with the guidelines established by the AAOS and accepted in the literature (Table 3). The criteria incorporated into the score – symptomatology, mechanism, diagnostic approach, conservative treatment elements, surgical indications, and post-operative considerations – were derived from AAOS educational materials and widely accepted literature on ankle impingement. In addition, relevant articles from the literature were considered while developing this score.[10,15,16]

Table 1. JAMA criteria and global quality score

The JAMA Benchmark scoring (1 point per question)
1. Authorship (authorship, contributors, affiliations, and credentials)
2. Attribution (References and sources used for the content and all relevant copyright information noted)
3. Disclosures (ownership, sponsorship, advertising, commercial funding, and potential conflict of interests)
4. Currency (Dates that content was posted and updated should be indicated)
Global quality score
1. Poor quality, poor flow of the site, most information missing, not at all useful for patients
2. Generally poor quality and poor flow, some information listed but many important topics missing, of very limited use of patients
3. Moderate quality, suboptimal flow, some important information is adequately discussed but others poorly discussed, somewhat useful for patients
4. Good quality and generally good flow, most of relevant information is listed, but some topics not covered, useful for patients
5. Excellent quality and excellent flow, very useful for patients

JAMA: Journal of American Medical Association

The videos were evaluated once by two orthopedic surgeons who are members of European Foot and Ankle Society in a blind manner, and the scores given by the two surgeons were averaged when calculating the scores.

Statistical Analysis

Statistical analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 27.0 (SPSS Inc., Chicago, IL, USA). Null hypotheses were rejected when $P<0.05$. Interclass correlation coefficient (ICC) was used to evaluate interobserver agreement. The correlation of categorical variables with the number of views and quality scores was determined using analysis of variance. Categorical data were reported as frequencies and relative frequencies, while continuous data were reported as means. The Mann–Whitney U-test was used to compare non-normally distributed data after normality analysis.

RESULTS

In the detailed analysis of a total of 93 videos included in the study, the mean duration of videos related to anterior AIS was 354.70 s (± 314.28) and the mean number of views was 27,166.08 (±54,898.69). The mean duration of videos related to posterior AIS was 1594 s (±424.94) and the mean number of views was 15,309.89 (±47,916.02). Posterior AIS videos are longer and have a higher like rate, whereas anterior AIS videos

Table 2. The 16 DISCERN questions, to be responded using a 1–5 (no to yes or low to high) score

1. Are the aims clear?
2. Does it achieve its aims?
3. Is it relevant?
4. Is it clear what sources of information were used to compile the publication?
5. Is it clear when the information used in the publication was used?
6. Is it balances and unbiased?
7. Does it provide details of additional sources of support and information?
8. Does it refer to areas of uncertainty?
9. Does it explain how the treatment works?
10. Does it explain the benefits of treatment?
11. Does it explain the risks of each treatment modality?
12. Does it explain what would happen unless treated?
13. Does it explain the effects of treatment on quality of life?
14. Is it clear that, more than one treatment choices exist?
15. Does it provide support for decision making?
16. Evaluate the overall quality of the publication as a source of information about treatment options based on answers to all questions above.

DISCERN: Quality Criteria for Consumer Health Information

Table 3. AISSS that we developed for the evaluation of content

AISSS
Case presentation (2 Points)
• Explains the symptomatology 1 point
• Explains the symptoms associated with activities 1 point
Information on ankle impingement (3 Points)
• Explains the impingement syndrome 1 point
• Defines the formation mechanism 1 point
• Defines the most common locations in 1 point
Diagnosis and evaluation (2 Point)
• Mentions physical examination and findings 1 point
• Mentions imaging methods 1 point
Conservative treatment (3 Points)
• Mentions activity modification and avoidance of provocative activities
• Mentions resting and physiotherapy 1 point
• Explains brace use 1 point
• Surgical treatment (8 Points)
• Mentions surgical treatment indications 1 point
• Mentions that various surgical techniques exist 1 point
• Mentions that typical ankle impingement commonly heal with arthroscopic debridement could be successfully treated 1 point
• Explains that, in patients who do not benefit from arthroscopic debridement or in patients with wide lesions, another procedure is needed 1 point
• Explains the advantages of arthroscopic surgery and its minimal invasive feature 1 point
• Explains the pre-operative preparation 1 point
• Explains the surgical position 1 point
• Gives information about the surgical approach 1 point
Post-operative care and complications (2 Point)
• Mentions surgical risks (infection, nerve injury, vascular injury, phlebitis, swelling or bleeding, complications associated with surgical tools, need for reoperation) (in the presence of 3 complications 1 extra point is added) mentions hospitalization time and, post-operative rehabilitation

AISSS: Ankle Impingement Syndrome Specific Score

have more views, and view rates but also show a higher dislike rate. Although high-quality videos were produced in both groups, the average scores of the groups are unfortunately very low. This indicates that the video content produced about AIS is neither reliable nor of high quality. The only statistically significant difference identified between AAIS and PAIS was in the DISCERN scores; however, here, the scores for AAIS were classified as "Poor," while those for PAIS were classified as "Very Poor." Thus, both groups are not of sufficient quality according to DISCERN. Other criteria evaluated are shown in Table 4.

The distribution of sources and video contents of the videos is shown in Table 5. When evaluating the sources uploading videos, it was observed that most videos related to posterior AIS came from academic (25.6%) and physician (30.2%) sources, this rate was academician (4%) and physician (30%) for anterior AIS.

A comparison of anterior and posterior AIS video scores is shown in Table 6. When evaluating the quality of video content using scoring systems, videos related to anterior AIS have higher average JAMA, GQS, and DISCERN scores than those related to posterior AIS. However, this difference is only statistically significant for the DISCERN score (p=0.045). Looking at the average AISSS, it is higher in the posterior impingement group, but the difference is not statistically significant (p=0.547).

The average scores for academic and physician-sourced videos were as follows: JAMA 2.06 (±0.79), GQS 2.6 (±0.83), DISCERN

Table 4. Descriptive statistics

	Mean	Minimum	Maximum	Std. deviation
Anterior impingement *n*=50				
Duration (s)	354.70	31.00	1267.00	314.28
Views	27.166.08	22	315,562	54,898.70
Number of days after upload	1761.84	40	4523	1200.48
Like	325.80	0	5839	864.04
Dislike	10.16	0	105	19.38
Observer 1 JAMA	2.02	1	4	0.742
Observer 2 JAMA	2.08	1	4	0.752
Observer 1 GQS	2.58	1	4	0.906
Observer 2 GQS	2.82	1	5	1.04
Observer 1 AISSS	7.02	2	18	3.48
Observer 2 AISSS	6.42	1	16	3.72
Observer 1 DISCERN	29.82	16	75	15.44
Observer 2 DISCERN	31.10	16	71	14.77
View rate	17.70	.03	151.49	30.48
Like rate	92.60	.00	100	19.66
Video power index	17.11	.00	148.82	29.76
Posterior impingement *n*=43				
Duration (s)	481.35	57	1594	424.94
Views	15,309.86	56	315.362	47,916.02
Number of days after upload	1806.79	37	4497	1175.73
Like	200.63	0	5800	877.98
Dislike	4.14	0	105	16.125
Observer 1 JAMA	1.86	1	4	0.774
Observer 2 JAMA	1.84	1	4	0.721
Observer 1 GQS	2.30	1	4	0.741
Observer 2 GQS	2.53	1	5	0.935
Observer 1 AISSS	6.88	2	18	3.75
Observer 2 AISSS	7.09	2	18	4.01
Observer 1 DISCERN	23.28	16	75	13.13
Observer 2 DISCERN	25.77	17	79	13.02
View rate	9.01	0.07	147.43	23.05
Like rate	93.03	0.00	100	21.32
Video power index	8.80	0.00	144.81	22.70

AISSS: Ankle impingement syndrome specific score; GQS: Global quality score; JAMA: Journal of American Medical Association; DISCERN: Quality Criteria for Consumer Health Information.

26.3 (±11.4), and AISSS 7.31 (±3.7). For videos uploaded by other sources, the average scores were JAMA 1.8 (±0.73), GQS 2.5 (±0.95), DISCERN 24.7 (±12.3), and AISSS 7.2 (±1.54).

The interobserver agreement for AISS, GQS, JAMA, and DISCERN was 0.877 (95% CI 0.814–0.918), 0.829 (95% CI 0.743–0.887), 0.905 (95% CI 0.857–0.937), and 0.938 (95% CI 0.906–0.959), respectively.

Table 5. Evaluation of sources and video contents of the videos

	Anterior impingement *n*=50 (%)	Posterior impingement *n*=43 (%)
Sources of the videos		
Academic	2 (4)	11 (25.6)
Physician	15 (30)	13 (30.2)
Non-physician	12 (24)	1 (2.3)
Trainer	8 (16)	8 (18.6)
Medical source	12 (24)	4 (9.3)
Patient	0 (0)	2 (4.7)
Commercial	1 (2)	4 (9.3)
Video contents		
Exercise education	15 (30)	8 (18.6)
Disease specific knowledge	21 (42)	24 (55.8)
Surgical technique or approach	11 (22)	5 (11.6)
Non-surgical management	3 (6)	1 (2.3)
Advertising	0 (0)	3 (7)
Patient experience	0 (0)	2 (4.7)

DISCUSSION

The most significant finding of this study is that the quality and content of videos related to AIS are insufficient. In addition, this study is the first to evaluate the quality of YouTube videos related to AIS. In our study, we observed that the number of views, likes, view rates, and VPIs of videos related to anterior AIS were higher than those of videos related to posterior AIS. We believe that this is due to the higher frequency and awareness of anterior AIS compared to posterior AIS.

Internet usage is quite common among orthopedic doctors and patients. The frequency of use in communication, especially among young surgeons and patients, is increasing day by day.[17,18] A study mentioned the possible relationship between patient satisfaction and a surgeon's use of social media platforms such as YouTube.[19] Another study mentioned that YouTube is the most commonly used social media platform for surgical preparation education.[20] Since YouTube is one of the most commonly used social media applications by patients and surgeons, it is important to consider the quality of uploaded video content as an important source of information for accurate guidance. However, when examining studies that evaluate the quality of orthopedic YouTube videos, numerous findings indicate that the video quality is

Table 6. Comparison of contents related to anterior and posterior impingement

	Mean rank	Sum of ranks	*p*
Views			
Anterior Impingement	50.46	2523	0.183
Posterior Impingement	42.98	1848	
Duration (sec)			
Anterior Impingement	44.02	2201	0.251
Posterior Impingement	50.47	2270	
Number of days after upload			
Anterior Impingement	46.44	2322	0.829
Posterior Impingement	47.65	2049	
Like			
Anterior Impingement	51.28	2564	0.099
Posterior Impingement	42.02	1807	
Dislike			
Anterior Impingement	54.00	2700	0.004
Posterior Impingement	38.86	1671	
View rate			
Anterior Impingement	50.18	2509.00	0.221
Posterior Impingement	43.30	1862.00	
Like rate			
Anterior Impingement	42.16	2108.00	0.049
Posterior Impingement	52.63	2263.00	
Video power index			
Anterior Impingement	50.56	2528.00	0.170
Posterior Impingement	42.86	1843.00	
JAMA			
Anterior Impingement	50.82	2541	0.121
Posterior Impingement	42.56	1830	
GQS			
Anterior Impingement	50.91	2545.50	0.125
Posterior Impingement	42.45	1825.50	
AISSS			
Anterior Impingement	45.44	2272.00	0.547
Posterior Impingement	48.81	2099.00	
DISCERN			
Anterior Impingement	52.19	2609.50	0.045
Posterior Impingement	40.97	1761.50	

AISSS: Ankle impingement syndrome specific score, GQS: Global quality score, JAMA: Journal of American Medical Association, DISCERN: Quality Criteria for Consumer Health Information

insufficient.[21-25] Our findings are similar to the literature in that the quality of YouTube video content in AIS is insufficient.

Harnett et al.[26] evaluated the quality of YouTube videos on ankle arthroplasty in their study and reported a JAMA score of 2.5±0.7, a GQS score of 3.2±1.0, and a DISCERN score of 49.2±11.5. Yuce et al.[10] reported a JAMA score of 0.85±1.05, a GQS score of 1.42±0.77, and a DISCERN score of 11.51±14.02 in their study on osteochondral lesions of the talus in the ankle. Our study shows that the average JAMA score of 1.95 indicates low content reliability. In addition, the average GQS, AISS, and DISCERN scores of 2.56, 6.94, and 27.71, respectively, indicate poor quality video content. Low-quality AIS videos can lead to patients not receiving sufficient information and being misdirected. This can lead to conflicts between patients and physicians, and to patients receiving information that is incomplete or inaccurate. We do not yet have sufficient information about the problems that this situation may cause.

The average view counts for AIS are 27,166 for anterior impingement and 15,309 for posterior impingement. When reviewing similar publications in the literature, the average number of views per video was found to be 100,149 for shoulder instability,[12] 288,597.7 for meniscus videos,[8] and 423,472 for disc herniation. The reason for the low number of views on videos related to AIS may be due to the fact that this condition is less well-known compared to other evaluated pathologies.

Videos related to posterior ankle impingement were longer in duration and demonstrated a higher like rate compared to anterior AIS content. This may reflect the relative unfamiliarity of posterior impingement among patients and clinicians, prompting content creators – particularly physicians and academic sources – to provide more detailed and explanatory videos. Longer and more comprehensive content may also contribute to viewer satisfaction, as indicated by the higher like rate, even though the overall quality scores of these videos remained low.

Videos on YouTube that offer high educational value may not always be as popular, which could result in lower view counts. This may mean that videos aimed at helping patients receive fewer views.[27] The number of views can be increased by preparing more interesting and high quality YouTube videos. In addition, shorter and more focused videos are more effective at capturing and maintaining an audience's attention, leading to higher rates of completion compared to longer videos.[28,29] Paying attention to these, especially in medical-sourced videos, can increase viewing rates and help patients and healthcare professionals reach the right source.

In a study, it was mentioned that the most important factor for the information obtained from YouTube videos is the source of the video.[30] In their study, Celik et al.[6] stated that although the videos uploaded by physicians were of higher quality than those uploaded by other sources, even these videos were not of sufficient quality. It has also been mentioned in other studies that videos from physicians and academic sources are of higher quality than videos uploaded from other sources.[6,29] In our study, the JAMA, GQS, DISCERN, and AISSS scores of academic and physician-based videos were found to be higher than those of other sources. However, the quality of these videos was not found to be at the desired level. Low-quality videos may lead to misconceptions regarding diagnosis and treatment, potentially influencing patient expectations, creating misinformation-driven anxiety, and placing additional educational burden on clinicians.

This study has some limitations. It should be noted that YouTube dynamics have constantly changing and evolving algorithms. When selecting video content to include in the study, only videos from the search date were considered. However, it is possible for video sources to remove the videos they upload at any time, making it impossible to access them. Even with the same keywords, it may not be possible to obtain the same results in searches conducted on different days. Another limitation is the AISS scoring system we use. Although this scoring system was developed by the authors for this study with the aim of maximizing objectivity in evaluations, it can still be interpreted differently by different author. The other limitation of this study appears to be the use of specific keywords and the restriction to English-language videos. Patients may use different search terms, and video quality may vary across different languages. Another important limitation is the wide variation in upload dates. Older videos may not incorporate contemporary diagnostic or treatment concepts, potentially affecting quality scores and contributing to inconsistencies between videos.

CONCLUSION

Although anterior AIS videos had higher visibility metrics, both groups demonstrated similarly poor quality, with only a small but significant difference in DISCERN scores favoring anterior AIS. To ensure patients and doctors obtain accurate and useful information, there is a need for higher quality video content to be uploaded to YouTube.

DECLARATIONS

Ethics Committee Approval: This study does not involve human participants in a manner that requires ethical approval according to the Declaration of Helsinki; therefore, ethics committee approval was not required.

Conflict of Interest: The authors declare that there is no conflict of interest.

Funding: The authors received no financial support for the research and/or authorship of this article.

Use of AI for Writing Assistance: Not declared.

Authorship Contributions: Concept – SY, MAT; Design – SY; Supervision – AY, MAT; Fundings – SY; Materials – SY, TO; Data collection &/or processing – SY, TO; Analysis and/or interpretation – MAT; Literature search – SY, MAT; Writing – SY, SCY; Critical review – SY, AY, TO, MAT, SCY.

Peer-review: Externally peer-reviewed.

REFERENCES

1. Madrigal L, Escoffery C. Electronic health behaviors among US adults with chronic disease: cross-sectional survey. J Med Internet Res 2019;21:e11240.
2. Potts HW, Wyatt JC. Survey of doctors' experience of patients using the internet. J Med Internet Res 2002;4:e5.
3. Shewale R. YouTube Statistics For 2024 (Users, Facts & More) 2024. Available from: https://www.demandsage.com/youtube-stats/#:~:text=As%20of%202024%2C%20YouTube%20is,in%20the%20world%20access%20YouTube. Accessed Aug 18, 2026.
4. Lavery KP, McHale KJ, Rossy WH, Theodore G. Ankle impingement. J Orthop Surg Res 2016;11:97.
5. Sanders TG, Rathur SK. Impingement syndromes of the ankle. Magn Reson Imaging Clin N Am 2008;16:29–38, v.
6. Celik H, Polat O, Ozcan C, Camur S, Kilinc BE, Uzun M. Assessment of the quality and reliability of the information on rotator cuff repair on YouTube. Orthop Traumatol Surg Res 2020;106:31–4.
7. Akpolat AO, Kurdal DP. Is quality of YouTube content on Bankart lesion and its surgical treatment adequate? J Orthop Surg Res 2020;15:78.
8. Kunze KN, Krivicich LM, Verma NN, Chahla J. Quality of online video resources concerning patient education for the meniscus: A youtube-based quality-control study. Arthroscopy 2020;36:233–8.
9. Cassidy JT, Fitzgerald E, Cassidy ES, Cleary M, Byrne DP, Devitt BM, et al. YouTube provides poor information regarding anterior cruciate ligament injury and reconstruction. Knee Surg Sports Traumatol Arthrosc 2018;26:840–5.
10. Yuce A, Oto O, Vural A, Misir A. YouTube provides low-quality videos about talus osteochondral lesions and their arthroscopic treatment. Foot Ankle Surg 2023;29:441–5.
11. Olçar HA, Güngör B, Kuru T, Aydın D, Nusran G. Evaluation of Youtube information quality about pes planus. J Am Podiatr Med Assoc 2024;114:22–168.
12. Etzel CM, Bokshan SL, Forster TA, Owens BD. A quality assessment of YouTube content on shoulder instability. Phys Sportsmed 2022;50:289–94.
13. Yaradılmış YU, Evren AT, Okkaoğlu MC, Öztürk Ö, Haberal B, Özdemir M. Evaluation of quality and reliability of YouTube videos on spondylolisthesis. Interdiscip Neurosurg 2020;22:100827.
14. 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;53:105–11.
15. Zyskowski M, Pesch S, Greve F, Matthey Fv, Wurm M, Zapf J, et al. Doctor YouTube: a quality analysis of medical information videos on the video platform YouTube on ankle sprain. Foot Ankle Orthop 2019;4:247301419S00458.
16. Ranade AS, Belthur MV, Oka GA, Malone JD. YouTube as an information source for clubfoot: a quality analysis of video content. J Pediatr Orthop B 2020;29:375–8.
17. Curry E, Li X, Nguyen J, Matzkin E. Prevalence of internet and social media usage in orthopedic surgery. Orthop Rev (Pavia) 2014;6:5483.
18. Burrus MT, Werner BC, Starman JS, Kurkis GM, Pierre JM, Diduch DR, et al. Patient perceptions and current trends in internet use by orthopedic outpatients. HSS J 2017;13:271–5.
19. Garofolo-Gonzalez G, Iturriaga CR, Pasternack JB, Bitterman A, Guyton GP. Social media use among foot and ankle orthopedic surgeons. Foot Ankle Orthop 2021;6:2473011420981926.
20. Rapp AK, Healy MG, Charlton ME, Keith JN, Rosenbaum ME, Kapadia MR. YouTube is the most frequently used educational video source for surgical preparation. J Surg Educ 2016;73:1072–6.
21. Erdem MN, Karaca S. Evaluating the accuracy and quality of the information in kyphosis videos shared on youtube. Spine (Phila Pa 1976) 2018;43:E1334–9.
22. Crutchfield CR, Frank JS, Anderson MJ, Trofa DP, Lynch TS. A systematic assessment of youtube content on femoroacetabular impingement: an updated review. Orthop J Sports Med 2021;9:23259671211016340.
23. Kunze KN, Alter KH, Cohn MR, Vadhera AS, Verma NN, Yanke AB, et al. YouTube videos provide low-quality educational content about rotator cuff disease. Clin Shoulder Elb 2022;25:217–23.
24. McMahon KM, Schwartz J, Nilles-Melchert T, Ray K, Eaton V, Chakkalakal D. YouTube and the achilles tendon: an analysis of internet information reliability and content quality. Cureus 2022;14:e23984.

25. Orhan Ö, Tekpınar İ, Çetin VB, Kaptan AY, Altay MA. Pes ekinovaruslu hastalar için YouTube etik ve kapsamlı bir bilgi kaynağı mı? Dicle Tıp Derg 2022;49:491–7. [Article in Turkish]
26. Hartnett DA, Yang DS, Lama CJ, McDonald CL, Daniels AH, Blankenhorn BD. YouTube as a source of patient information for ankle arthroplasty: quantitative analysis of video reliability, quality, and content. Foot Ankle Spec 2023;16:233–42.
27. Staunton PF, Baker JF, Green J, Devitt A. Online curves: a quality analysis of scoliosis videos on YouTube. Spine (Phila Pa 1976) 2015;40:1857–61.
28. Brame CJ. Effective educational videos: principles and guidelines for maximizing student learning from video content. CBE Life Sci Educ 2016;15:es6.
29. Jildeh TR, Abbas MJ, Abbas L, Washington KJ, Okoroha KR. YouTube is a poor-quality source for patient information on rehabilitation and return to sports after hip arthroscopy. Arthrosc Sports Med Rehabil 2021;3:e1055–63.
30. Erdem H, Sisik A. The reliability of bariatric surgery videos in youtube platform. Obes Surg 2018;28:712–6.