

# Content analysis of YouTube™ videos related to anesthesia practices in circumcision surgery in children

Çocuklarda sünnet ameliyatında anestezi uygulamaları ile ilgili YouTube™ videolarının içerik analizi

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# ABSTRACT

**Aim:** The aim of our study was to evaluate the accuracy and reliability of information provided to patients by videos on the application of anesthesia in pediatric circumcision surgery on the video platform YouTube™, an Internet information source.

**Materials and Methods:** The keywords "anesthesia in circumcision surgery" and "anesthesia in circumcision surgery in children" were typed into the search bar on YouTube™. A total of 220 videos were viewed. The date of upload, number of views, duration, number of likes and dislikes, source of upload, and number of comments were recorded. The reliability and quality of the video were assessed using the Global Quality Scale (GQS) and the modified DISCERN scale.

**Results:** After exclusion criteria, a total of 38 videos were evaluated. The videos were divided into four groups according to the anesthesia method mentioned/recommended in the content. When comparing between the groups in terms of GQS score, modified DISCERN score and video content, it was observed that the mean scores of the videos in the local anesthesia group were statistically significantly lower than those in both the general and local anesthesia groups, separated by age (p<0.001) When the videos were evaluated according to the GQS score, 15 videos (39.4%) were of low quality, 15 videos (39.4%) were of medium quality, and 8 videos (21%) were of high quality. The duration, number of interactions, modified DISCERN score, and video content score of high-quality videos were significantly higher than those of medium and low-quality videos (p<0.05).

**Conclusion**: The YouTube<sup>™</sup> video platform has a narrow range of information about anesthesia in pediatric circumcision surgery, and the content of videos on this topic is mostly inadequate.

Keywords: Circumcision, anesthesia, children, YouTube, internet.

# ÖΖ

**Amaç:** Çalışmamızın amacı bir internet bilgi kaynağı olan YouTube™ video platformunda yer alan çocuklarda sünnet cerrahilerinde uygulanan anestezi uygulamaları ile ilgili videoların hastalar için sağladığı bilginin doğruluğu ve güvenilirliğinin değerlendirilmesidir.

Gereç ve Yöntem: Araştırma için YouTube™ sayfasında arama çubuğuna 'sünnet cerrahisinde anestezi' ve 'çocuklarda sünnet cerrahisinde anestezi' anahtar kelimeleri yazıldı. Toplamda 220 video izlendi. Videoların yüklenme tarihi, süresi, görüntülenme sayısı, beğenme ve beğenmeme sayısı, videoyu yükleyen kaynak, yorum sayısı kaydedildi. Videonun güvenilirliği ve kalitesi modifiye DISCERN ölçeği ve Global Quality Scale (GQS) ölçeği kullanılarak değerlendirildi.

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**Bulgular:** Dışlama kriterlerinden sonra toplamda 38 video değerlendirildi. Videolar içeriğinde bahsedilen/önerilen anestezi yöntemine göre dört gruba ayrıldı. GQS skoru, modifiye DISCERN skoru ve video içeriği açısından gruplar aralarında kıyaslandığında, lokal anestezi grubundaki videoların puan ortalamalarının yaşa göre ayırarak hem genel hem lokal anestezi grubundaki videolardan istatistiksel olarak anlamlı düşük olduğu gözlendi (p<0,001). Videolar GQS skoruna göre değerlendirildiğinde 15 videonun (%39,4) düşük kalitede, 15 videonun (%39,4) orta kalitede, 8 videonun (%21) yüksek kalitede olduğu görüldü. Yüksek kaliteli videoların süreleri, etkileşim sayıları, modifiye DİSCERN skoru ve video içeri puanlaması orta ve düşük kaliteli videolara göre anlamlı yüksek bulundu (p<0,05).

**Sonuç:** YouTube™ video platformunda çocuklarda sünnet cerrahisinde anestezi hakkında dar bir bilgi yelpazesi mevcuttur ve bu konu ile ilgili videolarının içeriği çoğunlukla yetersizdir.

Anahtar Sözcükler: Sünnet, anestezi, çocuklar, YouTube, internet.

# INTRODUCTION

Circumcision is the surgical cutting of the foreskin (prepuce) covering the glans to expose the tip of the penis. It is one of human history's oldest and most performed operations. In our country, almost all boys are circumcised, while it has been reported that 30% of men aged 15 years and older are circumcised worldwide, the majority of whom are Muslim men (1).

It is very important to provide appropriate anesthesia and analgesia for circumcision. Circumcisions can be performed under local anesthesia, sedation, or general anesthesia. While pediatric surgeons generally prefer to perform circumcision under general anesthesia, some surgeons use local anesthesia. The child's age or personal experience may be a factor in these preferences. Each method of anesthesia has advantages and disadvantages depending on the child and the experience and time management of the person performing the circumcision. Circumcision is a relatively common and significant source of stress for children, although they do not feel pain when it is performed under local anesthesia. All pediatric surgical procedures can cause emotional distress and trauma to children and their families because of the fear and excitement experienced by psychologically unprepared children (2). General anesthesia also carries a risk of mortality due to various life-threatening complications such as respiratory, circulatory and allergic complications, and there is a significant increase in the incidence of nausea and vomiting in children after general anesthesia (3). In addition, general anesthesia is considered a disadvantage by many surgeons or families because it requires operating room conditions, an experienced team, and is more expensive (4).

The Internet, which is accessible to a large part of the world's population, has become one of the most widely used sources of information today due to its wide variety of information sources (5). People view the Internet as a valuable source of health information and use it to research their health conditions before seeking professional help (6). YouTube<sup>™</sup> is the second most used website and video- sharing platform in the world, through easily accessible smartphones. computers, and televisions (7). There is no control mechanism before sharing videos on YouTube™, making it a subjective site that can be useful for users but can also lead to misleading information (8, 9). Today, the YouTube<sup>™</sup> video platform has become very popular for medical searches. Studies evaluating the content of videos on the YouTube<sup>™</sup> video platform about various diseases and their treatments have raised concerns about the accuracy and reliability of the video content, and it has been reported that the information provided by these videos is not homogeneous (10-12).

There is no study in the literature analyzing the videos on the YouTube<sup>™</sup> video platform about the use of anesthesia in pediatric circumcision, which is highly questioned by parents and accurate information is needed. In this study, we aimed to evaluate the quality and accuracy of the information content of videos on the YouTube<sup>™</sup> video platform about anesthesia applications in pediatric circumcision.

# MATERIALS and METHODS

### Study design and participants

In our study, the Turkish videos related to the application of anesthesia in circumcision surgery in children on the YouTube<sup>™</sup> video platform, which is an online video-sharing resource, were

reviewed on March 31, 2024. Publicly available videos on YouTube™ were evaluated, and as no human participants/animals were involved, no ethics committee approval was required in this study, as in similar studies (13, 14).

First, the search history was cleared, and the videos were searched by entering the keywords "anesthesia in circumcision surgerv" and "anesthesia in circumcision surgery in children" into the search engine. Previous studies of Internet search engines have found that more than 90% of users evaluate the first 3 pages of search results (15). In our study, the videos on the first 3 pages for each keyword were evaluated, and a total of 220 videos were viewed. All videos were carefully analyzed by both researchers to determine which videos to include/exclude in the study.

All videos were carefully analyzed by the researchers to determine which videos to include/exclude in the study.

Exclusion criteria for the study (Figure-1);

1. The video language is not Turkish

- 2. Irrelevant to the topic
- 3. Music in the video
- 4. Lack of audio in the video
- 5. Repetition of the same video

For each video included in the study, the URL address, video duration (seconds), number of views, number of likes, number of dislikes, number of comments, time elapsed since upload anesthesia method (days), mentioned/recommended in the video (local, general, local + general, both local and general by separating the methods according to the age of the child), person narrating the videos (physician (pediatric surgeon-urologistpediatrician-anesthesiologist), patient. other). target audience (patient, healthcare professional, unknown). The parameters view rate [number of views/time since upload x 100%] and interaction index [(number of likes - number of dislikes) / number of views x 100%] were calculated (10).

### Assessment of reliability

The reliability of the video was assessed using the modified DISCERN (m DISCERN) scale in terms of the reliability and completeness of the information contained in the content. The DISCERN scale was designed to assess the quality of written information about treatment options for any health problem in individuals using health services. The m DISCERN has been adapted from the original version and includes five yes-no questions (16):

1. Is the video clear, concise, and understandable?

2. Does it use reliable sources of information?

3. Is the information presented balanced and unbiased?

4. Are additional sources of information provided for the patient?

5. Are areas of uncertainty/controversy addressed?

Each "yes" answer is scored as 1 point and each "no" answer is scored as 0 points, and the reliability of the information in the video is scored between 1 and 5.

## Assessment of quality

The Global Quality Scale (GQS) used to assess the quality of videos has a scoring system ranging from 1 to 5. Video flow, usability, and quality can be assessed using the GQS; 1-2 points indicate low quality, 3 points indicate medium quality, and 4-5 points indicate high video quality (16).

The following scoring system was used in this study:

1 Low quality, poor site flow, most information missing, not useful at all for patients.

2 Overall low quality and poor site flow. Some information is available, but many important topics missing, very limited use for patients.

3 Medium quality, suboptimal flow, some important information adequately discussed but others insufficient, partially useful to patients.

4 High quality, generally good flow. Includes most relevant information, but some topics are missing, useful for patients.

5 High quality and good flow, very useful for patients. Provides complete and clear information.

# Evaluation of video content

A list of 10 questions was prepared by the researchers about the topics we expected to be included in the content to create an informative video about anesthesia practices in circumcision surgery. For each answer in the video, 1 point was determined, and the total score was recorded.

Topics that we expect to be in every video content,

1. General information about circumcision surgery (its performance, technique, etc.)

2. General information about anesthesia (types; general anesthesia, local anesthesia)

3. Detailed information about the proposed type of anesthesia

4. Advantages and disadvantages of one type of anesthesia over another

5. Age range for which anesthesia is recommended or not recommended

6. Information about what to do before surgery

7. Information on what to do in the postoperative period

8. Information about complications

9. Knowledge of anesthesia consent requirements

10. Information about the appropriate areas where the procedure should be performed and by whom it should be performed.

#### Statistical analysis

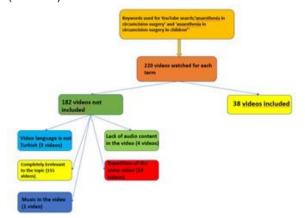
Statistical evaluations in our studv were performed with the program SPSS for Windows 20.0 (IBM SPSS, Chicago). In summarizing the data, nominal data were presented as numbers and percentages (%), and measured data were presented as mean (±standard deviation) and median (minimum-maximum). Normal distribution variables were assessed by the Kolmogorov-Smirnov test. Mann-Whitney U test was used for non-parametric variables and chi-squared test for was categorical data. p<0.05 considered statistically significant.

### RESULTS

A total of 220 videos were viewed. A total of 182 videos were excluded from the study because 155 of them were "not related to the topic", 3 were "foreign language", 19 were "duplicate", 4 were "no sound", and 1 video was only music. A total of 38 videos were included in the study, and the evaluation of the general characteristics of the videos is shown in Table-1. The videos included in the study were divided into 4 groups according to the anesthesia methods mentioned/recommended in the content. In 7 videos it was mentioned that circumcision should be performed only under general anesthesia, in 14 videos only under local anesthesia, in 3 videos under general plus local anesthesia, and in 14 videos it was mentioned that it should be

performed either under local or general anesthesia, depending on the age of the child. It was observed that 14 of the videos were prepared by 'a urology specialist', 12 by 'a pediatric surgery specialist', 4 by 'a pediatric urology specialist', 4 by 'a general practitioner', 1 by 'a anesthesia and resuscitation specialist', and 3 by ' a non-physician'. The mean GQS score of the videos in the study was 2.71±0.95 and the mean m DISCERN score was 1.92±1.19.

The mean number of views of the videos was 11576.02±27707.93 and the mean number of likes was 100.13±359.58. In addition, it was observed that there was no dislike in any of the videos in the study. When the content evaluation criteria of the videos in the study were evaluated. it was observed that the mean scores were 2.44±2.32 (Table-1). When video duration, number of views, number of likes, number of comments, interaction index, and viewing rate were compared between groups, the rates were higher in the group that mentioned both local and general anesthesia according to age but the results were not statistically significant (Table-2). When the videos in the study were compared between groups in terms of GQS score, m DISCERN score, and video content, it was observed that the mean scores of the videos in which local anesthesia was mentioned/suggested were statistically significantly lower than the which both general and local videos in anesthesia were mentioned/suggested, separated by age anesthesia methods (p<0.001) (Table-2).

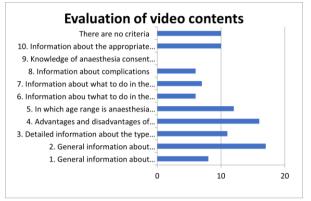


**Figure 1.** Flowchart of video selection according to exclusion criteria.

All videos in the study were evaluated with a GQS score and grouped into low, medium, and high quality according to the quality of information provided. 15 videos (39.4%) were low quality, 15 videos (39.4%) were medium guality, and only 8 videos (21%) were high quality. The duration of high-quality videos was significantly longer than that of low-quality videos (p=0.001). The number of interactions of medium quality videos was significantly lower than that of high-quality videos (p=0.024). The m DISCERN scores of highquality videos were significantly higher than those of low and medium quality videos (p=0.000 and p=0.045, respectively). In addition, the m DISCERN scores of medium quality videos were significantly higher than those of low-quality videos (p=0.024). When comparing according to video content scores, it was observed that the mean video content scores of low-quality videos were significantly lower than medium and highquality videos (p=0.005 and p=0.000) (Table-3).

The distribution of parameters included in all videos in the study is shown in Figure-2. Among the identified criteria for evaluating video content, most of the videos contained information about "general information about anesthesia (types; local, general)" (44.7%) and "advantages and disadvantages of the proposed anesthesia method compared to another" (42.1%). None of the videos in the study provided information

about 'the need for consent for anesthesia'. The video content was evaluated in the groups classified according to the anesthesia methods mentioned/recommended, as shown in Table-4. When the video content was evaluated according to groups, it was observed that the required parameters were more in the group where both local and general anesthesia were mentioned/recommended according to age.



**Figure 2.** Evaluation of videos according to the information they contain

There was a significant positive correlation between the duration of the videos in the study and the GQS score, the m DISCERN score, and the video content scores (Table-5).

**Table-1.** Evaluation of the general characteristics of the videos (n=38).

	Mean ± SD	Mean (min – max)
Video duration	120.02 ± 126.15	73 (20 - 480)
Number of views	11576.02 ± 27707.93	2170 (37 - 161000)
Number of likes	100.13 ± 359.58	7 (0 - 2100)
Number of dislikes	0 ± 0	0 (0 - 0)
Number of comments	17.52 ± 66.43	0 (0-330)
Number of interactions	0.68 ± 0.67	0.46 (0 – 2,91)
Number of days published	1341.84 ± 1064.64	1059.50 (210 – 4015)
Viewing rate	964.77 ± 2104.78	220.05 (3.03 – 11027.00)
GQS score	2.71 ± 0,95	3 (0 - 4)
m DİSCERN score	1.92 ± 1.19	2 (0 – 5)
Video content score	2.44 ± 2.32	2 (0 – 8)

GQS; Global Quality Scale, m DİSCERN; Modified DİSCERN

Table-2. Comparison of the content of the videos according to the anesthesia method mentioned/recommended.

	General (n=7)		Local (n=14)		General+local (n=3)		Both general and local, separated by age (n=14)		
	Mean ± SD	Median (min - max)	Mean ± SD	Median (min - max)	Mean ± SD	Median (min - max)	Mean ± SD	Median (min - max)	р
Video duration (sec)	111 ± 137	63 (40 -420)	73 ± 92	40 (20 - 375)	100 ± 25	97 (76 - 126)	176 ± 149	128 (27 - 480)	0.055
Number of views	5618 ± 7351	1300 (127 - 19000)	7432 ± 10444	2923 (37 - 33127)	10169 ± 17175	403 (103 - 30000)	19001 ± 43683	3049 (268 - 161000)	0.906
Number of Likes	8 ± 7	5 (1 -21)	41 ± 51	14 (0 -146)	18 ± 26	3 (2 -48)	224 ± 582	10 (1 -2100)	0.804
Number of comments	1 ± 2	0 (0 -5)	1 ± 4	0 (0 -13)	9 ± 14	2 (0 -26)	44 ± 107	1 (0 -330)	0.252
Interaction index	0.35 ± 0.25	0.36 (0.05 - 0.78)	0.7 ± 0.67	0.57 (0 - 2.7)	1.19 ± 1.5	0.49 (0.16 -2.91)	0.74 ± 0.6	0.61 (0.05 - 1.86)	0.509
Number of days on air	1716 ± 1679	720 (360 - 4015)	1145 ± 780	945 (210 - 2555)	1470 ± 1283	1370 (240 -2800)	1325 ± 970	1060 (240 - 3600)	0.993
Viewing rate	241.2 ± 151.2	210,3 (34,7 - 473,2)	958.9 ± 1528.3	321.1 (3 - 5641)	381.1 ± 597.5	42,9 (29,4 -1071)	1457.5 ± 3096.1	211,3 (36.3 - 11027)	0.792
Video content	3 ± 3	3 (0 -8)	1 ± 1	0 (0 -3)	1 ± 1	2 (0 -2)	4 ± 2	4 (1 -7)	<0.001
GQS score	3 ± 1	3 (2 -4)	2 ± 1	2 (0 -3)	3 ± 1	3 (2 -3)	3 ± 1	4 (2 -4)	0.001
m DİSCERN score	2 ± 1	2 (1 -3)	1 ± 1	1 (0 -2)	2 ± 1	2 (1 -2)	3 ± 1	3 (1 -5)	<0.001

p<0.05 is statistically significant

GQS; Global Quality Scale, m DİSCERN; Modified DİSCERN

Table-3. Evaluation of video features according to the quality of videos determined by GQS score.

	Low quality (n=15)		Medium Quality (n=15)		High Quality (n=8)		р
	mean±sd	Median (min-max)	mean±sd	Median (min-max)	mean±sd	Median (min-max)	value
Video duration	68.2±87.6	40 (20-375)	80.2±36.4	76 (34-139)	291.7±152.4	328 (30- 480)	0.001
Number of views	9390.0±10243 .5	5120 (37- 33127)	4310.7±7674. 7	1300 (103- 30000)	29297.1±56 991.9	1782 (268- 161000)	0.581
Number of Likes	35.2±47.8	12 (0-146)	13.1±23.3	4 (0-85)	385.0±748.1	11 (2-2100)	0.140
Number of comments	2.2±3.6	0 (0-13)	3.0±6.8	0 (0-26)	73.5±136.6	0,5 (0-330)	0.890
Number of interactions	0.5±0.6	0,4 (0-2.7)	0.5±07	0.3 (0-2.9)	1.1±0.5	1,1 (0,3- 1,8)	0.021
Number of days published	1588.8±1149. 7	1370 (210- 4015)	1418.2±1145. 6	1024 (240- 3600)	735.5±398.7	710 (330- 1460)	0.189
Viewing rate	864.0±1459.2	363 (3-5641)	342.3±475.6	162 (13- 1670)	23206±3968 .8	253 (74- 11027)	0.402
m DİSCERN score	1.0±0.6	1 (0-2)	2.0±0.7	2 (1-3)	3.5±0.9	3 (2-5)	0.000
Video content score	0.6±1.1	0 (0-4)	2.6±1.2	3 (1-5)	5.6±1.9	6 (2-8)	0.000

p<0.05 is statistically significant

GQS; Global Quality Scale, m DİSCERN; Modified DİSCERN

	Total (n/%) (n=38)	General (n=7)	Local (n=14)	General+local (n=3)	Both general and local, separated by age (n=14)
<ol> <li>General information about circumcision (technique etc.)</li> </ol>	8 (21.0%)	2	0	0	6
2. General information about anesthesia (types; general, local?)	17 (44.7%)	2	1	2	12
<ol> <li>Detailed information on the type of anesthesia recommended</li> </ol>	11 (28.9%)	1	2	2	6
4. Advantages and disadvantages of one type of anesthesia over another	16 (42.1%)	6	3	0	7
<ol><li>At what age is anesthesia recommended or not recommended?</li></ol>	12 (31.5%)	1	2	0	9
<ol><li>Information about what to do in the preoperative period</li></ol>	6 (%15.7)	3	0	0	3
<ol><li>Information about what to do in the postoperative period</li></ol>	7 (18.4%)	2	2	0	3
8. Information about complications	6 (15.7%)	1	0	0	5
9. Knowledge of the need for anesthesia consent	0 (0.0%)	0	0	0	0
<ol> <li>Information about the appropriate areas where the procedure should be performed and by whom.</li> </ol>	10 (26.3%)	4	0	0	6
There are no criteria	10 (26.3%)	1	8	1	0

Table-5. Evaluation of the relationship between the duration of the videos and GQS score, m DISCERN score and video content scores.

	GQS score	m DISCERN score	Video content score
Video duration (p değeri/ r)	0.000 (r=0.574)	0.000 (r=0.652)	0.000 (r=0.700)

p<0.05 is statistically significant

GQS; Global Quality Scale, m DİSCERN; Modified DİSCERN

#### DISCUSSION

The aim of this study was to evaluate the quality reliability of Internet information and on anesthesia for circumcision. Circumcision has been performed for thousands of years for cultural, religious, aesthetic, and public health reasons and remains one of the most common surgical procedures performed worldwide. This surgery, usually performed in childhood, can be one of the most traumatic experiences of childhood due to the pain experienced. Therefore, it is very important to provide appropriate anesthesia and analgesia for circumcision (17). Circumcision is performed under two types of anesthesia, local anesthesia and general anesthesia. These methods of anesthesia depend on many factors, such as the physician, the parents' wishes, the age of the child, and the environment in which they are used.

YouTube<sup>™</sup>, the second most visited website in the world, has become a popular resource for patients seeking information about medical conditions and general health information (18, 19). It has been reported that video-based resources will grow rapidly in the next few years and that videos will become people's primary source of information (20, 21). At the same time, recent studies have identified YouTube™ as a useful tool for physicians to promote their services and disseminate general health information (22, 23). However, the unregulated nature of this open-access media platform allows for the simultaneous presentation of videos that provide quality/useful information as well as videos that provide misleading/false information. In a study by Koller U et al (24) analyzing a total of 133 arthritis-related YouTube™ videos, it was reported that 84-86% of the videos were of poor quality, with only 2-4% having excellent information content. In a study evaluating 114 YouTube™ videos about implants, the information content of the videos was generally low (25). Menziletoglu D et al (26) analyzed 107 YouTube<sup>™</sup> videos on impacted wisdom tooth

surgery and reported that 30.85% had low-quality

information and only 16.82% had high- quality

content. They stated that the majority of these high-quality videos contained accurate and useful information because they were uploaded by healthcare professionals. When the quality of the videos about anesthesia methods 38 in circumcision surgery was evaluated according to the GQS score after the exclusion criteria in our study, 39.4% were of low quality, 39.4% were of medium quality and only 21% were of high quality. The source of 92% of the videos was physicians, but only 1 of them was an anesthesiology and reanimation physician. Therefore, we think that the information content on anesthesia methods is insufficient.

When we examined the content of the videos, we found that the most common topic was general information about anesthesia (types of anesthesia; general and local anesthesia) and information about the advantages and disadvantages of the proposed anesthesia method compared to the other. However, there was very little information about the age at which anesthesia methods used in circumcision surgerv are appropriate, what should be done in the preoperative period, what complications can occur intraoperatively, and what the patient can expect in the postoperative period. Again, we believe that the reason for this is that most video belong to physicians other sources than anesthesiologists and resuscitators. When patients meet face-to-face with anesthesia and resuscitation physicians, the physicians discuss all the topics examined in this study, and if they have any questions, they have the opportunity to resolve them immediately. It may be more accurate for the patient to receive information from the physician face-to-face. Considering the fact that patients use the Internet so much to get information, we believe that anesthesiologists and resuscitators should prepare YouTube™ videos for more detailed and accurate information about anesthesia for circumcision surgery.

In a survey study conducted in Ankara province of our country, it was reported that 13.3% of the circumcision's of 1235 children were performed by traditional circumcisers and the remaining part was performed by physicians, and these were pediatric surgeons or urologists (27). In our study, the majority of video sources were physicians and the majority of them were pediatric surgeons and urologists. The fact that circumcision surgery is mostly performed by these two specialists explains the fact that YouTube<sup>™</sup> video resources on this topic are more prevalent in these specialties.

It was found that the GQS scores of the videos in our study were positively correlated with the duration, number of likes, number of comments, number of interactions, and view rate of the videos. The results of the study are similar to the results of the study by Öztürk & Gümüş, who evaluated videos on the YouTube<sup>™</sup> video platform about dental treatment under general anesthesia in children (28).

The content of YouTube<sup>™</sup> video platform has a variable structure due to the video results that change daily according to subjective search criteria (keyword selection, video viewing time, interest, etc.) or uploaded-deleted video results. This is the first limitation of the study. As in other studies, the fact that the data collection method is instantaneous also affects the results of the current study. As new videos are uploaded or deleted from the YouTube<sup>™</sup> video platform, the results of the study will also vary. In addition, only Turkish language videos were analyzed in this study. The inclusion of other languages in the analysis may also affect the results of the study. This is the second limitation of the study.

# CONCLUSION

On the YouTube™ video platform, there is a narrow range of information about anesthesia for pediatric circumcision, and the content of the videos on this topic is mostly inadequate. Most of the videos deal mainly with the surgical side of circumcision surgeries, and general information about anesthesia methods used in these general surgeries, information about complications that should or may occur in the preoperative, intraoperative, and postoperative periods is almost not included. Therefore, parents whose children will be circumcised may find it difficult to access accurate information about the anesthesia used during circumcision surgery from the videos on the YouTube™ video platform.

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