Laparoscopic Inguinal Hernia Repair on Screen: A Qualitative Analysis Assessing YouTube's Educational Value

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Background

With the advent of distance education, there has been exponential growth in the dissemination of surgical videos for various purposes.
We aimed to perform an **analysis of YouTube video quality on laparoscopic inguinal hernia repair**.

Methods

A systematic search was performed on YouTube using the keywords 'laparoscopic inguinal hernia'. The top 100 results were compiled into a dataset. We gathered descriptive characteristics such as the number of views, likes, dislikes, and video duration. **The videos were categorized into four groups: Physician, Academic, Commercial, and Society**. All videos were independently evaluated by two general surgery residents using the LAP-VEGaS assessment tool (0 to 18 points).

Table 3 LAP-VEGaS video assessment tool

	Item description	Not presented (0)	Presented, partially (+1)	Presented, completely (+2)
1	Authors and Institution information. Title of the video including name of the procedure and pathology treated	☐	☐	☐
2	Formal presentation of the case, including patient details and imaging, indication for surgery, comorbidities and previous surgery. Patient anonymity is maintained	☐	☐	☐
3	Position of patient, access ports, extraction site and surgical team	☐	☐	☐
4	The surgical procedure is presented in a standardised step by step fashion	☐	☐	☐
5	The intraoperative findings are clearly demonstrated, with constant reference to the anatomy	☐	☐	☐
6	Relevant outcomes of the procedure are presented, including operating time, postoperative morbidity and histology when appropriate	☐	☐	☐
7	Additional graphic aid is included such as diagrams, snapshots and photos to demonstrate anatomical landmarks, relevant or unexpected finding, or to present additional educational content	☐	☐	☐
8	Audio/written commentary in English language is provided	☐	☐	☐
9	The image quality is appropriate with constant clear view of the operating field. The video is fluent with appropriate speed	☐	☐	☐

Results

A total of 50 were included.
24 were in the physician group, 13 were classified as society videos, 12 were in the academic group, and only 1 fit the commercial group.
The mean LAP-VEGaS score for all videos was 10.74 ± 3.64.
Most academic and physician videos lacked formal case presentations and graphic aids.

Table II
Overall LAP-VEGaS score by video category

Video Category	Mean (SD)
Academic	10.69 (3.54)*
Physician	7.86 (3.94)
Society	8.33 (5.06)
Commercial	5.25 (2.38)*
Overall	7.95 (3.95)

LAP-VEG4S, laparoscopic video educational guidelines.
* Academic videos had significantly higher mean LAP-VEGaS score than Commercial videos (P = .033).

Table III
Unfulfilled LAP-VEGaS criteria by video category

LAP-VEGaS criteria	Academic (n, X)	Physician (n, Z)	Society (n, X)	Commercial (n, X)	Overall (n, Z)
1. Authors and institution information	o (0)	4 (.29)	1 (33)	1 (13)	6 (18)
2. Formal case presentation	5 (63)	9 (64)	3 (100)	8 (100)	25 (76)
3. Patient position and access	4 (50)	10 (71)	2. (66)	8 (100)	24 (7.3)
4. Step-by-step procedural walkthrough	o (0)	3 (.21)	o (0)	3 (38)	6 (18)
5. Intraoperative findings demonstrated	4 (50)	8 (57)	1 (33)	8 (100)	21 (64)
6. Operative time and other relevant outcomes	6 (75)	13 (93)	3 (100)	8 (100)	.30 (91)
7. Additional graphic aids	5 (63)	7 (50)	1 (33)	5 (63)	18 (55)
8. Audio or written commentary in English language	o (0)	1 (7)	o (0)	3 (38)	4 (13)
9. Appropriate image quality and video speed	o (0)	o (0)	1 (33)	o (0)	1 (3)

LAP-VEGAS, laparoscopic video educational guidelines.

Conclusion

Our findings indicate that **YouTube videos on inguinal hernia repair require significant improvement and standardization** to serve as effective and high-quality teaching tools.