ISW26-366-01 (0798)

OSTOMATES AND PLANNED ESSENTIAL SURGERY: LEVERAGING TIKTOK TO MITIGATE STOMA-RELATED MORBIDITY

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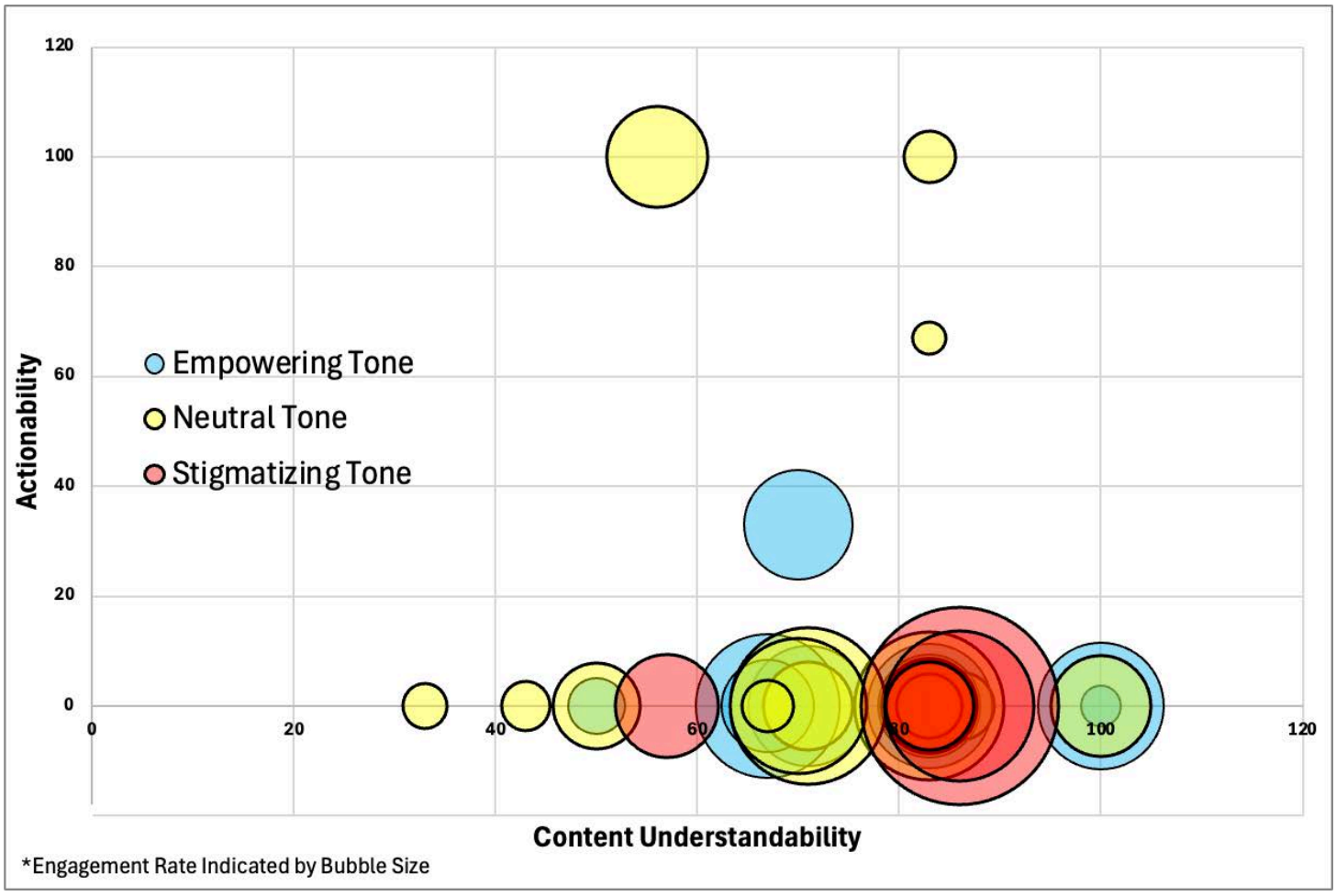
Introduction:
Surgical backlogs for planned essential surgeries (PES) delay stoma reversals, leaving patients ("ostomates") to rely on informal sources like TikTok for guidance. TikTok, with 1 billion+ users monthly, is a potentially high-yield intervention point for stoma care education and support. This study aims to evaluate the understandability, actionability, engagement, and potential stigmatization of global TikTok content on stoma care.

Material and Method:
We performed a mixed-methods framework analysis of the top 40 TikTok videos retrieved using stoma-related search terms. Inclusion criteria were English-language, original content addressing stoma care. Two reviewers independently assessed understandability and actionability using the Patient Education Materials Assessment Tool - Audiovisual (PEMAT-A/V) and perceived stigma via qualitative assessment of narrative tone. A third reviewer independently resolved conflicts. Engagement rates (ER) were calculated using the formula: ER= (likes+comments+shares)/views×100.

Results:
Of 40 videos, 33 were included. Most TikToks (67%; n=22) had high understandability (PEMAT-A/V score >70%), but only four (12%; n=4) were actionable. Neutral tone was most common (55%; n=18), followed by empowering (33%; n=11) and stigmatizing (12%; n=4). Critically, stigmatizing videos had the highest median ER at 6.48%, surpassing empowering (4.07%) and neutral videos (2.94%). Stigmatizing videos also had a 7x greater share rate than empowering videos (0.37% vs. 0.05%).

Conclusion:
While most TikTok videos on stoma care are easy to understand, they seldom provide actionable material. Stigmatizing content drove the highest engagement, which may worsen patient self-perceptions while awaiting reversal. Clinician- or institution-led content and healthcare institution-content creator partnerships could enhance educational value, mitigate stigma, and facilitate ostomates' self-management while awaiting PES.


120
100
80
60
40
20
0
Actionability
Empowering Tone
Neutral Tone
Stigmatizing Tone
0
20
40
60
80
100
120
Content Understandability
*Engagement Rate Indicated by Bubble Size

ISW26-366-02 (0720)

EVALUATION OF A LOW-COST SIMULATION MODEL FOR TEACHING VASCULAR HEMOSTASIS AND ANASTOMOSIS ACROSS SURGICAL SPECIALTIES

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Introduction:
Simulation-based training plays a vital role in surgical education, offering a safe and effective platform for developing technical skills. However, access to high-fidelity simulation models is often limited in resource-constrained settings. This study aimed to evaluate the effectiveness and acceptability of a low-cost simulation model designed to teach vascular hemostasis and anastomosis techniques among postgraduate trainees and junior doctors from diverse surgical specialties.

Material and Method:
A total of 38 participants from various specialties—Obstetrics and Gynecology (26.3%), Oral and Maxillofacial Surgery (18.4%), Orthopedics (18.4%), ENT–Head and Neck Surgery (15.8%), among others—were trained using the model. Post-training, participants completed a questionnaire assessing five domains: realism, anastomosis suitability, hemostasis suitability, confidence boost, and willingness to recommend the model. Responses were rated on a 5-point Likert scale.

Results:
The model was positively received. Realism scored a mean of 3.61 ± 0.82, with 44.7% rating it neutral. Anastomosis suitability had the highest rating (mean 4.29 ± 0.61), with 92.1% agreeing or strongly agreeing. Hemostasis suitability scored 3.92 ± 0.63, with 76.3% expressing agreement. Confidence boost had a mean of 4.08 ± 0.43, with 94.8% noting improved confidence. A total of 92.2% participants agreed or strongly agreed they would recommend the model (mean 4.13 ± 0.53).

Conclusion:
The low-cost simulation model was effective in teaching vascular skills across multiple specialties. While realism ratings were moderate, high scores in skill-specific domains and confidence building suggest strong educational value. This model offers a promising, accessible training tool for surgical education in low-resource settings.

ISW26-366-03 (0682)

SAFE PAEDIATRIC MALE CIRCUMCISION SIMULATOR FOR NON-SPECIALIST PROVIDERS IN LOW AND MIDDLE INCOME COUNTRIES

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Introduction:
Paediatric male circumcision is widely performed in low- and middle-income countries (LMICs), often by non-specialist physicians and non-physician providers due to limited access to specialist surgeons. This can lead to avoidable severe complications. We developed a low-cost, do-it-yourself simulator to enable providers to self-teach safe circumcision techniques

Material and Method:
The simulator was built from inexpensive, locally available materials. Training included a theoretical knowledge module, a readiness quiz, and hands-on practice. Twelve learners (six non-specialist physicians, six non-physician providers) completed the training. Skills were assessed using peer- and self-assessment checklists. Pre- and post-training surveys, plus a focus group, evaluated the simulator's impact.

Results:
All learners achieved 100% on the readiness quiz before simulator training and felt prepared for hands-on practice. Post-training, 91.7% rated the learning experience as good or excellent and found the simulator easy to set up and use. Most (83.3%) rated it effective or very effective in demonstrating the real-life procedure. Confidence improved markedly: all learners felt confident or very confident to perform paediatric circumcision afterward, including two with little or no prior confidence. Most (91.7%) rated the training modules and scenarios as adequate or very adequate. All agreed the self-assessment checklist was easy to use and helped track their skill acquisition progress.

Conclusion:
The Safe Paediatric Male Circumcision simulator is a practical, low-cost training tool that improves provider competence and confidence, potentially reducing complications in LMICs. It may serve as a model for other essential surgical simulations in global health.


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SURGICRYL® 910
Sterile Synthetic Absorbable
Braided Polyglactine 910 Suture
Do not resterilize
75cm violet
round bodied
taper point
1/2 circle
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HR-22
LOT 219802
2021-08
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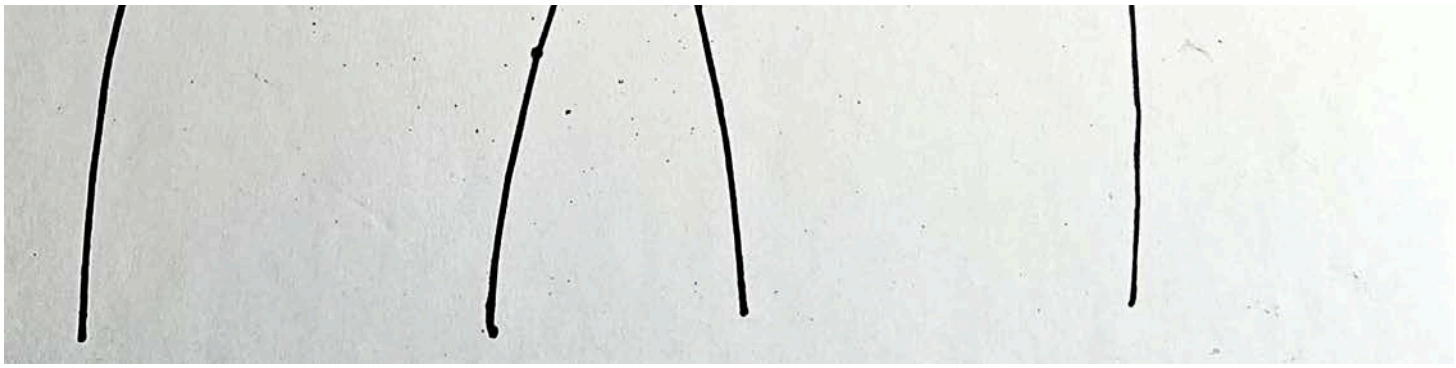
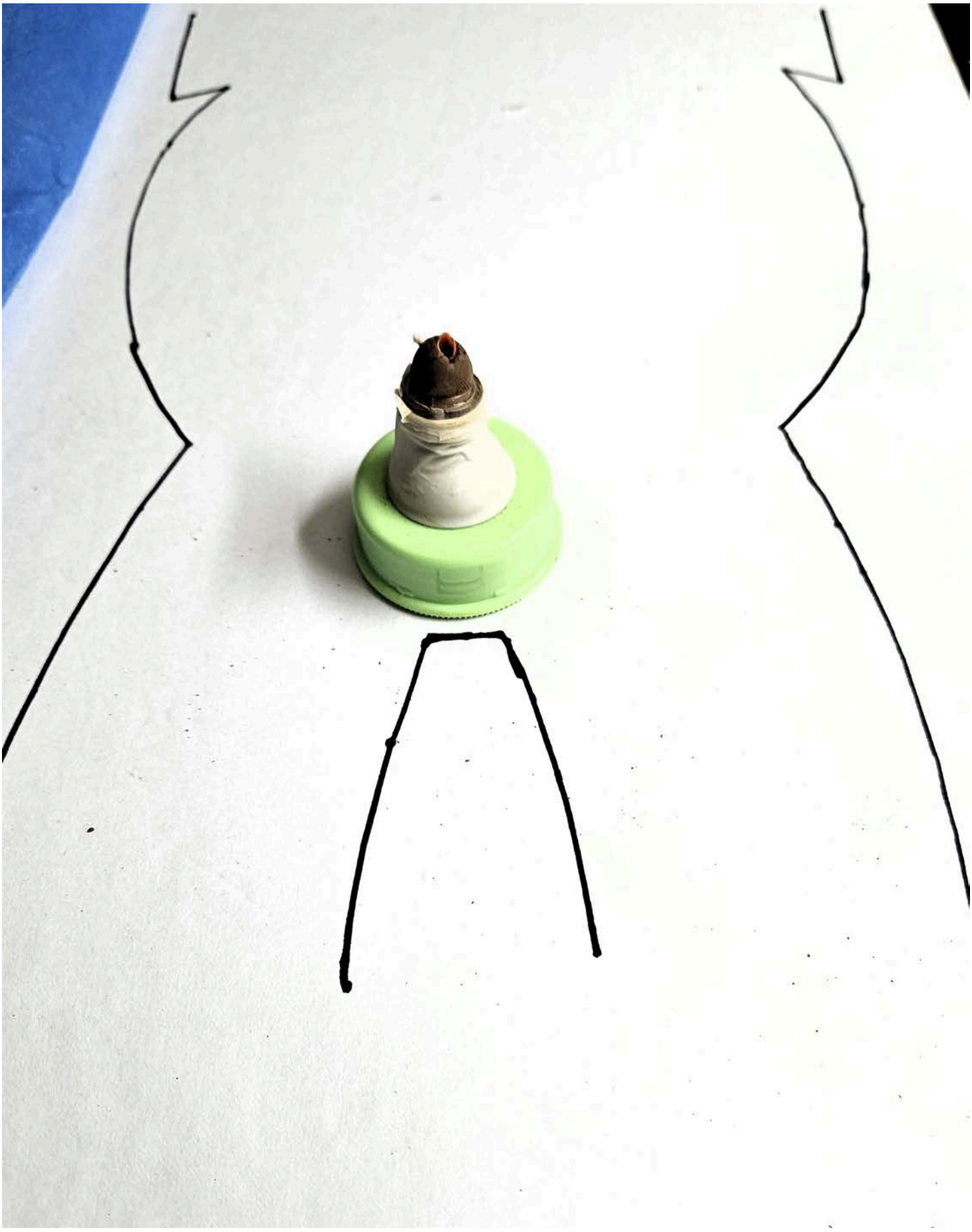
AG Steinerberg 8, 4780 ST. VITH BELGIUM 0653
STERILE SINGLE USE





ISW26-366-04 (0914)

INTEGRATING RADIOLOGY INTO SURGICAL EDUCATION: A QUALITY IMPROVEMENT INITIATIVE

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Introduction:
Accurate interpretation of radiological imaging is essential for safe and effective surgical decision-making. Within the UK National Health Service (NHS), discrepancies between out-of-hours and in-house radiology reporting for acute surgical patients can adversely affect clinical outcomes. Additionally, limited multidisciplinary team (MDT) engagement and insufficient radiology teaching for surgical trainees hinder both patient care and professional development.

Material and Method:
Aims : To enhance surgical education, standardise imaging interpretation, and improve patient management through structured, collaborative radiology–surgery teaching sessions. Methods : A Quality Improvement Project established bi-monthly radiology–surgery meetings. Consultant radiologists, surgeons, and MDT members reviewed acute and complex benign surgical cases with case-based teaching. Prospective feedback was collected after each session; retrospective questionnaires assessed changes in knowledge, confidence, and perceived clinical impact.

Results:
High satisfaction rates (>90%) were reported, with participants noting improved understanding of complex imaging and greater integration of radiological findings into surgical decision-making. Retrospective analysis indicated a reduction in management changes following in-house re-reporting, suggesting improved diagnostic accuracy. The program also facilitated leadership and organisational skills among junior surgical staff through meeting coordination roles, aligning with NHS educational principles.

Conclusion:
Structured radiology–surgery–meetings embedded within NHS practice have demonstrated clear benefits in surgical education, interdepartmental collaboration, and patient management. By fostering an environment of open discussion, shared expertise, and mutual learning, the initiative bridges traditional specialty divides and reinforces the value of integrated imaging review in surgical decision-making. The positive reception from participants and measurable clinical impact support the potential for adaptation in other multidisciplinary clinical areas.

ISW26-366-05 (0917)

AI-ASSISTED SCORE FOR OPTIMAL PORT INSERTION AND CLOSURE IN LAPAROSCOPIC SURGERY

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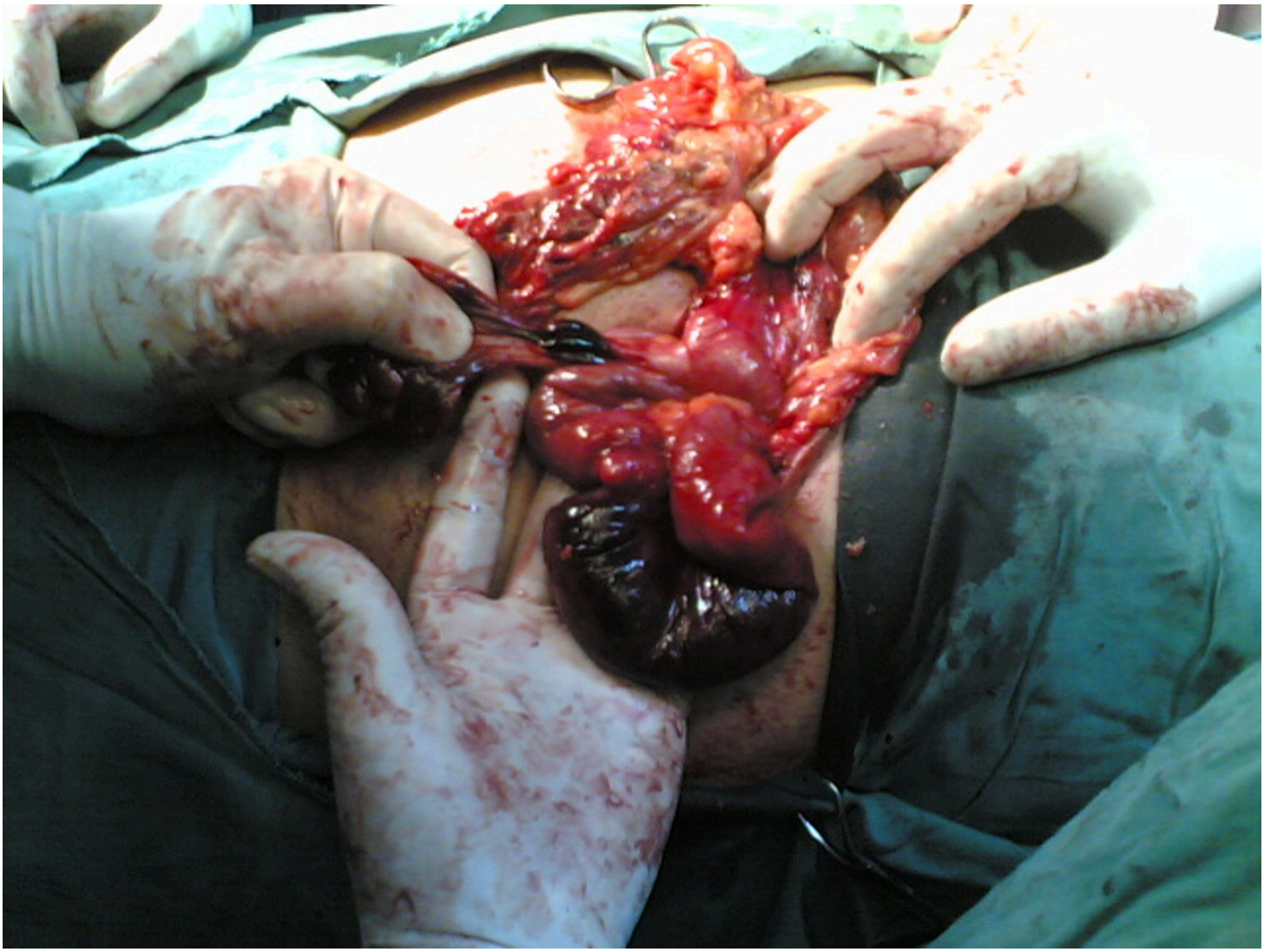
Introduction:
Trocar-site incisional hernia(TSIH)remains under-recognized,with prospective imaging studies reporting higher rates than historically appreciated.Risk is concentrated at larger(≥10–12 mm)ports and at midline/umbilical sites,&is amplified by obesity,advanced age,smoking,wound infection,&fascial enlargement for specimen extraction.Current practice often applies uniform closure rules rather than individualized risk mitigation.We propose an AI-assisted scoring framework to support patient-specific port planning&closure decisions.

Material and Method:
We synthesized odds and hazard ratios from the literature to derive preliminary point weights for a multivariate risk score. Candidate predictors encompassed patient factors(age,BMI,sex,smoking status,chronic respiratory disease,occupation with unavoidable heavy lifting)&anatomic/procedural factors (abdominal circumference at the umbilicus with upper&lower abdominal measures,port site&size,planned fascial enlargement for extraction,and trocar trajectory—perpendicular versus oblique/Z-entry).Points were assigned proportional to reported effect sizes and physiologic plausibility(e.g.,intra-abdominal pressure).The primary outcome for future validation is TSIH within 12 months confirmed clinically and/or by imaging;secondary outcomes include acute port-site complications,conversion,&re-intervention.

Results:
The preliminary rubric stratifies risk as Low(0–3),Moderate(4–7),&High(≥8).High-risk profiles trigger practical recommendations:avoid umbilical ≥10–12mm ports when feasible;prefer lateral 5 mm ports for non-extraction tasks;employ angled/Z-entry;close all ≥10 mm defects meticulously &consider closure devices for 8–10 mm in high-risk contexts;minimize fascial enlargement and consider alternative extraction sites.This structured approach is expected to reduce TSIH&standardize decision-making while preserving minimally invasive advantages

Conclusion:
An AI-assisted, risk-stratified approach to port selection and closure can standardize decisions and potentially reduce trocar-site incisional hernia; multicentre prospective validation is required before broad adoption.



ISW26-366-06 (0910)

GOING BANANAS – A RELIABLE LOW FIDELITY MODEL FOR THE ASSESSMENT AND TRAINING OF SUTURING SKILLS

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[2]*Sheffield Teaching Hospital Trust, Plastic Surgery, Sheffield, United Kingdom*

[3]*Faculty of Medicine, Universiti Malaya, University Malaya Eye Research Centre, Kuala Lumpur, Malaysia*

[4]*Faculty of Medicine, Universiti Malaya, Department of Social and Preventive Medicine, Kuala Lumpur, Malaysia*

[5]*Faculty of Medicine, Universiti Malaya, Medical Student, Kuala Lumpur, Malaysia*

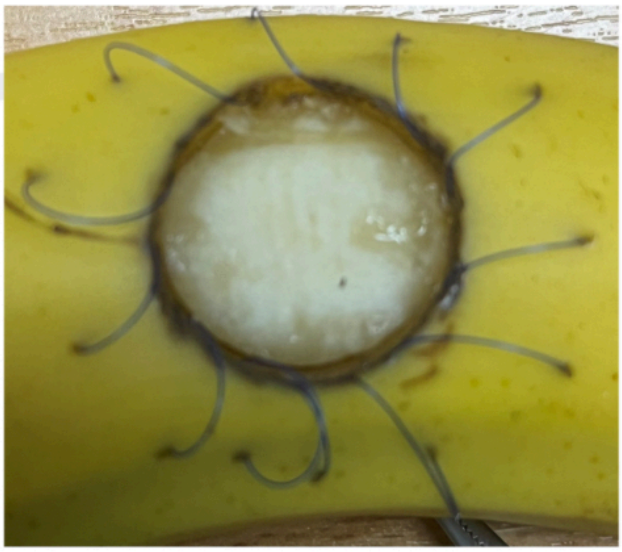
[6]*Kings College, Medical, London, United Kingdom*

Introduction:
Competency-based training requires reliable models and objective technical skill assessments, ideally with haptic and visual feedback to ensure proper technique. We present a scoring system that measures core elements of surgical stitching, such as spatial accuracy and needle rotation, using a low-fidelity banana model.

Material and Method:
Participants suture around a 2 cm hole in banana skin, completing twelve radial stitches. Three surgeons and two trainees reviewed ninety-four photos from a surgical trainees' competition, evaluating each according to six criteria: mushing, suture count, radial and equidistant placement, and skids or tears. A cumulative score was calculated based on key needle handling principles.

Results:
The overall ICC score demonstrated excellent reliability (ICCavg = 0.970, 95% CI: 0.960–0.979, $p < 0.001$). Among the individual domains, mush (ICCavg = 0.974, 95% CI: 0.964–0.981, $p < 0.001$) and number of suture (ICCavg = 0.976, 95% CI: 0.967–0.983, $p < 0.001$) also showed excellent reliability. RADIAN (ICCavg = 0.810, 95% CI: 0.742–0.865, $p < 0.001$), EQUIDISTANT (ICCavg = 0.799, 95% CI: 0.726–0.857, $p < 0.001$), TEAR (ICCavg = 0.829, 95% CI: 0.767–0.879, $p < 0.001$), skid and tear (ICCavg = 0.848, 95% CI: 0.793–0.892, $p < 0.001$) demonstrated good reliability.

Conclusion:
A low-fidelity model effectively assesses fundamental surgical skills. Our findings demonstrate high interclass correlation and reliability of suturing skills. The scoring system allows students and trainers to objectively monitor stitching ergonomics and track progress in real time.



Element	Domain	ICC (Average Measures)	95% CI (Lower–Upper)	*p*-value	Reliability
	Overall	0.970	0.960 – 0.979	<0.001	Excellent reliability
A	Mush	0.974	0.964 – 0.981	<0.001	Excellent reliability
B	Number of sutures, radian and equidistant	0.923	0.896 – 0.946	<0.001	Excellent reliability
	Number of sutures	0.976	0.967 – 0.983	<0.001	Excellent reliability
	Radian	0.81	0.742 – 0.865	<0.001	Good reliability
	Equidistant	0.799	0.726 – 0.857	<0.001	Good reliability
C	Skid and Tear	0.86	0.809 – 0.900	<0.001	Good reliability
	Skid	0.421	0.213 – 0.588	<0.001	Poor reliability
	Tear	0.849	0.794 –	<0.001	Good

	[illegible]	[illegible]	0.892	[illegible]	reliability

ISW26-366-07 (0789)

DIAGNOSTIC AND THERAPEUTIC ACCURACY OF LARGE LANGUAGE MODELS IN EMERGENCY DIGESTIVE SURGERY: A PRELIMINARY EVALUATION USING THE ARTIFICIAL INTELLIGENCE PERFORMANCE INSTRUMENT (AIPI) SCORING SYSTEM

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[2]*Humanitas Gavazzeni University Hospital, 2. Department of Minimally Invasive General and Oncologic Surgery, Bergamo, Italy*

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Introduction:
Large Language Models (LLMs) including ChatGPT-4, Claude Sonnet 4, and DeepSeek have gained interest as decision-support tools in medical education. Their performance in high-acuity contexts like emergency digestive surgery, however, had remained under-evaluated. This study presented a preliminary evaluation of the diagnostic and therapeutic performance of three LLMs in emergency digestive surgery using the Artificial Intelligence Performance Instrument (AIPI) and aimed to determine their potential to assist junior surgical trainees in diagnostic reasoning and management planning.

Material and Method:
Data from twenty emergency digestive surgery cases were collected prospectively between May and July 2025. Each case was independently submitted to ChatGPT-4, Claude Sonnet 4, and DeepSeek using identical standardized prompts. Responses were scored independently using AIPI across four dimensions: primary diagnosis, differential diagnosis, investigations, and treatment. An independent blinded evaluation by expert surgeons is currently being conducted for comparative analysis.

Results:
All models correctly identified the primary diagnosis in 14/20 cases (70%). Claude Sonnet 4 and ChatGPT-4 achieved 70% accuracy in differential diagnoses, and DeepSeek slightly higher at 75%. Regarding complementary investigations, Claude 4 scored highest (90%), followed by ChatGPT-4 (85%) and DeepSeek (80%). Treatment recommendations were appropriate in 85% of cases for DeepSeek, and 80% for the other two models.

Conclusion:
This preliminary evaluation suggests that LLMs provide clinically relevant support in emergency surgical decision-making. Their consistent performance across diagnostic and therapeutic tasks indicates potential value in medical education. Ongoing expert validation will clarify their role in complex cases.

ISW26-366-08 (0256)

FROM PAGES TO PIXELS: A GLOBAL CALL TO REDESIGN SURGICAL EDUCATION FOR THE MODERN ERA

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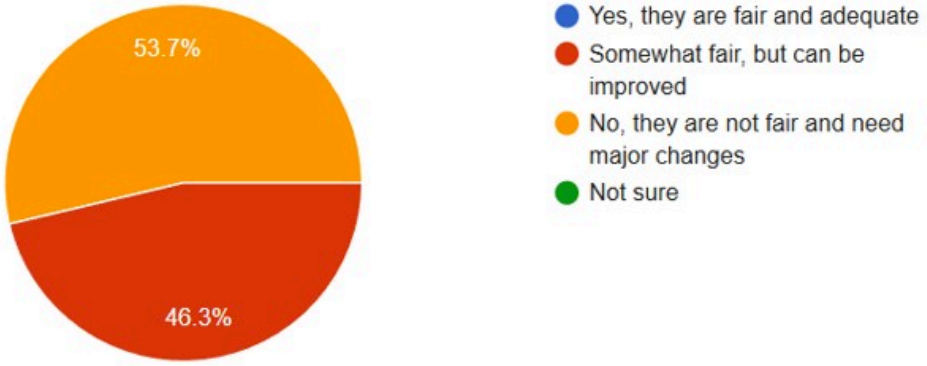
Introduction:
Surgical training has not kept pace with the transformative changes occurring in operative practice. As we enter an era of robotics, fluorescence imaging, and AI-guided surgery, anatomy is no longer confined to textbooks but encountered dynamically in the operating theater. We aimed to assess how well surgical education is adapting globally to this shift.

Material and Method:
A cross-sectional, multi-institutional survey was conducted among surgical trainees in India and the United Kingdom, across various specialties and training levels (2–10 years in field of surgery or other related fields). The questionnaire assessed usage of surgical videos, awareness of peer-reviewed video journals, and engagement in video-based learning or editing.

Results:
Among 212 respondents, 92.4% (n=196) could not name a single peer-reviewed video-based surgical journal, while 94.3% (n=200) reported relying on YouTube videos—primarily the night before surgery—for operative preparation. 52% had never edited a surgical video, despite recognizing its educational value. Across both countries, trainees expressed a strong need for formal video-based curricula, mentorship in surgical video creation, and access to curated video libraries. There were no significant regional disparities, indicating a global shortfall.

Conclusion:
Our study reveals a striking disconnect between the sophistication of modern surgical practice and the stagnation of surgical education. As operative anatomy becomes increasingly visual and complex, repeated exposure to structured, video-based microlearning enhances long-term memory and procedural recall. To prepare surgeons for modern demands, integrating peer-reviewed video journals, editing skills, and immersive platforms like AR/VR into training is essential—not optional. Surgical education must evolve to match the sophistication of today’s operating rooms.

Do you think the current methods of assessing surgical skills for jobs and promotions are fair and reflective of a surgeon's true ability?



Word Cloud for: Any suggestions on how surgical education can be improved?