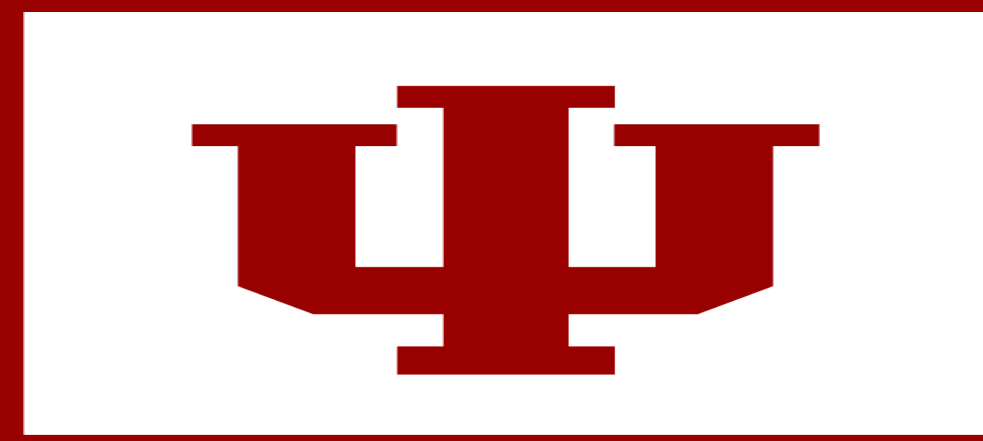




Development of a Coaching Program to Improve Surgeon Laparoscopic Cholecystectomy Performance

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Introduction

Bile duct injuries (BDI) during laparoscopic cholecystectomy (LC), while infrequent, cause significant patient morbidity and quality of life compromise. The critical view of safety (CVS) has been proposed as a method to reduce BDI. However, since literature suggests that up to 80% of surgeons do not achieve an adequate CVS, self-assessment is an inadequate method to promote performance improvement¹. Coaching has been proposed as a superior method to promote behavioral change². The aim of this study was to develop a peer coaching program for practicing surgeons to improve LC performance including identification of the CVS.

Materials & Methods

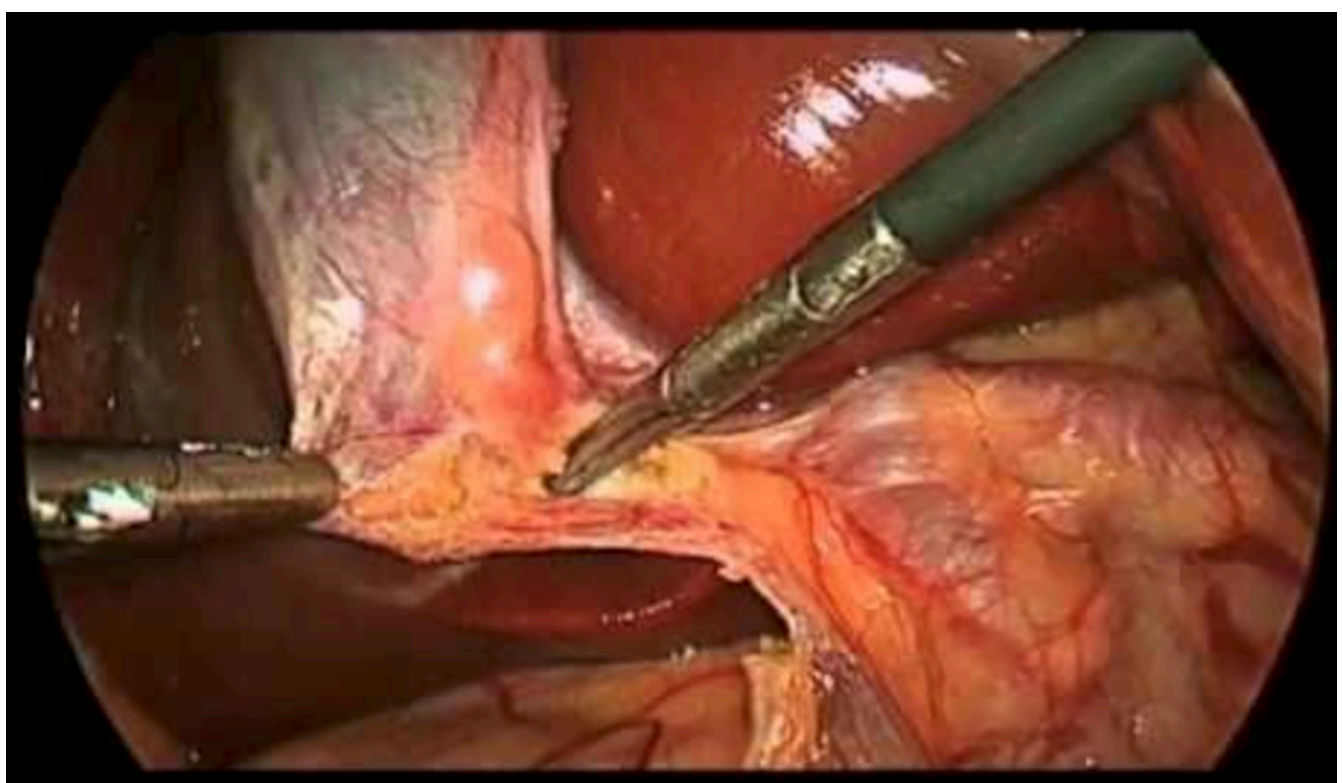


A human factors specialist and a surgeon educator developed the peer program using coaching best practices from sports, education, managerial training, and health care. A peer coaching guide was further augmented to reflect best practices in establishing and maintaining good rapport and communication incorporating techniques from relevant fields including psychology, communication, and simulation.



The human factors specialist initially trained the peer SAGES coaches on effective coaching techniques + monitored and debriefed each coaching session thereafter

Participating surgeons submit a LC video → assessed by 3 pretrained, calibrated, blinded SAGES raters using GOALS, LC specific OPRS and CAT rating scales, and the Strasberg scale for CVS → Randomized stratification based on the scores to either the coaching or a control group (no coaching)



The peer coaches also review and rate the videos and then facilitate a half hour one-to-one online coaching session with participating surgeons. During these video-guided sessions coaches review surgeon ratings, provide detailed feedback regarding performance, and offer suggestions for potential improvements, including how to safely obtain the CVS. The coach and participant then collaborate to establish goals for the next session around 3 months later following a new video LC submission. The value of the program is assessed by comparing surgeon ratings before and after coaching.

Results

Currently, eleven surgeons are participating in this program and have submitted LC videos for evaluation and coaching. Five surgeons have received coaching by expert surgeons and their feedback on the study design has been positive. Significant performance improvements were seen for the two surgeons who have currently been reassessed after coaching.

Conclusions

We have developed a pilot peer coaching program for LC performance improvement of practicing surgeons with encouraging initial results, supporting its wider implementation and study. Implementation of robust coaching interventions offered by SAGES have the potential to positively affect surgeon performance and patient outcomes.

References

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2. Stefanidis, D. et al: How often do surgeons obtain the critical view of safety during laparoscopic cholecystectomy?. 2017; Surg Endosc 31, 142–146