

SELF-ASSESSMENT DURING A TWO-DAY LAPAROSCOPIC COLECTOMY COURSE: CAN SURGEONS JUDGE HOW WELL THEY ARE LEARNING NEW SKILLS?

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We propose to determine the accuracy of self-assessment of technical skills in practicing surgeons participating in a Laparoscopic Colectomy course.

Registrants in a two-day course (lectures, live OR demonstrations, hands-on animal lab) completed pre- and post- course questionnaires to determine their prior laparoscopic experience and whether they intended to start performing laparoscopic colectomy after the course. During the animal lab, representative portions of their operative performance were videotaped (including colon mobilization, mesenteric dissection and vascular ligation). Participants completed an 11-item rating scale scoring instrument to self-assess their performances pertinent to laparoscopic colectomy. Examples of items rated included depth perception, bimanual dexterity, and use of assistants. Scores of each item were anchored (1 - not acceptable, 3 - barely adequate and 5 – excellent) with specific descriptions for each item. Using the same instrument that the participants used to self-assess their performance, two trained raters independently viewed each participant's videotape, in blinded fashion.

Twenty-two surgeons participated in this study. 46% were routinely performing basic laparoscopic surgery (eg. cholecystectomy) in their practices and 54% were performing more advanced laparoscopic surgery. At the end of the course, 98% indicated that they intend to perform laparoscopic colectomy. For the trained raters, the scoring instrument demonstrated excellent inter-rater reliability: $r = 0.76$ ($p < 0.001$). However, there was no significant correlation between trained rater scores and self-assessment scores. Furthermore, the scores obtained by the two trained raters (mean 2.62 and 2.99) were significantly lower than the self-assessment scores (mean 4.05, $p < 0.001$).

This is the first study to evaluate surgeon self-assessment in the setting of learning new technical skills. The rating instrument demonstrated excellent inter-rater reliability. Surgeons consistently and significantly overestimated their operative performance. This finding raises the issue of assessing technical skills and training of surgeons prior to performing laparoscopic colectomy.