

Acquiring advanced laparoscopic colectomy skills - the issues

ABSTRACT

Colorectal surgery has been revolutionised towards minimally invasive surgery with the emergence of enhanced recovery protocol after surgery initiatives. However, laparoscopic colectomy has yet to be widely adopted, due mainly to the steep learning curve. We aim to review and discuss the methods of overcoming these learning curves by accelerating the competency level of the trainees without compromising patient safety. To provide this mini review, we assessed 70 articles in PubMed that were found through a search comprised the keywords laparoscopic colectomy, minimal invasive colectomy, learning curve and surgical education. We found England's Laparoscopic Colorectal National Training Programme (LAPCO-NTP) England to be by far the most structured programme established for colorectal surgeons, which involves pre-clinical and clinical phases that end with an assessment. For budding colorectal trainees, learning may be accelerated by simulator-based training to achieve laparoscopic dexterity coupled with an in-theatre proctorship by field experts. Task-specific checklists and video recordings are essential adjuncts to gauge progress and performance. As competency is established, careful case selections with the proctor are essential to maintain motivation and ensure safe performances. A structured programme to establish competency is vital to help both the proctor and trainee gauge real-time progress and performance. However, training systems both inside and outside the operating theatre (OT) are equally useful to achieve the desired performance.

Keyword: Colorectal surgery; Laparoscopic colectomy; Learning curve; Minimally invasive surgery; Surgical education