

Changes in the Operating Time of Laparoscopic Cholecystectomy of the Surgeons and Novices between 1994-2012

P. Lukovich, A. Zsirka, L. Harsányi

1st Surgical Department, Semmelweis University of Medicine, Budapest, Hungary

Abstract

Background: The technique of laparoscopic cholecystectomy (LC) has not changed over the past recent years; therefore the possibility is open to study its learning curve.

Methods: Retrospectively, every third year's LCs were analysed between 1994 and 2012. The learning curves of surgeons and novices were defined in the department. The surgeons have scored the laparoscopic technique of their colleagues on a scale of 1 to 10 and operation time (OT) was examined in light of the assistant's technique.

Results: 2,216 LCs were performed in the examined period. The average OT of the department was 78.3 minutes in 1994, which had decreased to 45.4 minutes (42.0%) by 2003. The improvement rates of surgeons and novices were 36.7% and respectively 9.9%, and the variance between the minimum and maximum OT changed in parallel. The OT in the initial 3 years of learning had become 13% shorter by 2006 and the first section of the learning curve has also become steeper. In case of surgeons whose technical points were low and OT was short, the assistants' average technical score was significantly higher than in case of surgeons whose technical score was high and the OT was short.

Conclusion: The OT alone is not an objective factor in the definition of the surgical technique.

Key words: laparoscopic cholecystectomy, learning curve, novices, assistant

Corresponding author: Péter Lukovich, MD

Semmelweis University

1st Surgical Department, Üllői út 78, Budapest, H-1082

E-mail: lukovich66@gmail.com