

Long learning curve for surgeons operating on oesophageal cancer

According to this large Swedish cohort study from Karolinska Institutet in Sweden and Imperial College London, a surgeon who operates on oesophageal cancer must have performed 60 operations to prevent any lack of experience adversely affecting the long-term survival of the patients. The finding, which is published in the *Journal of Clinical Oncology*, can influence clinical practice.

While it is well known that patient survival after oesophagectomy is related to the surgeon's experience of the procedure, no figure has been put on how many operations are needed for the surgeon to attain the competence needed for achieving optimal results as regards patient survival. This study is the first to examine the surgeon's learning curve in relation to short and long-term mortality rates and shows that a surgeon needs to perform 15 operations to obtain stable results as regards survival during the first months following the operation, and 60 before he or she achieves optimal results regarding long-term survival.

The study examined a Swedish cohort of 1,821 patients operated on for oesophageal cancer in Sweden between 1987 and 2010 by 139 different surgeons. Using data on which surgeons performed which operations it was found that even though the surgeons were experienced with other procedures when starting to perform oesophagectomies, the turning point for their learning curves for a stable 5-year fatality rate was at 60 operations.

The results indicate that a properly organised mentorship and training programme should be introduced for oesophageal cancer surgery. Oesophageal cancer operations should be centralised to a limited number of surgeons and those who start operating on oesophageal cancer should perform many operations together with an experienced oesophageal cancer surgeon before they begin to operate independently.

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