

## **Weekday of surgery influences oesophageal cancer surgery prognosis**

Patients who undergo surgery for oesophageal cancer early in the week – on a Monday or Tuesday – have a higher chance of long-term survival than those who have such surgery at the end of the working week. This is according to a new study from Karolinska Institutet published in *Annals of Surgery*.

Oesophageal cancer surgery is a time-consuming and demanding procedure (taking on average six and a half hours), and it is a recognised fact that the experience of the surgeon has a substantial impact on the patient's chance of survival. It is possible that surgical precision to some extent declines towards the end of the week, perhaps due to the accumulated burden on the surgeon and the team.

The study examined 1,748 patients operated on for oesophageal cancer in Sweden between 1987 and 2010, and found that five-year mortality was 13 per cent higher for patients who had undergone surgery on a Wednesday to a Friday than for those who had been operated on during a Monday or Tuesday after controlling for age, other diseases, stage and type of tumour (histology), pre-treatment with cytostatics and radiotherapy, and the surgeon's experience of oesophageal cancer surgery.

The link between weekday of surgery and mortality was strongest for early-stage tumours (0-I), moderate for medium-stage tumours (II) and non-existent for advanced-stage tumours (III-IV). The lack of effect for advanced tumours can be due to the generally low likelihood of being cured; the chances of surviving up to five years after the operation are about 10 per cent. With early-stage tumours, it is more the surgery that determines the outcome.

More studies are needed to confirm these results. But if the findings are supported by future research, oesophageal cancer surgery should be planned to take place primarily at the beginning of the week.

**Publication:** "Weekday of esophageal cancer surgery and its relation to prognosis", Jesper Lagergren, Fredrik Mattsson and Pernilla Lagergren, *Annals of Surgery*, online 2015 Nov 10. PMID: 26565140.

**Link to publication:** <http://www.ncbi.nlm.nih.gov/pubmed/26565140>

### **For further information, please contact:**

Professor Jesper Lagergren

Department of Molecular Medicine and Surgery, Karolinska Institutet

Tel: +46(0)8 517 760 12 or +46(0)70 227 40 88

Email: [jesper.lagergren@ki.se](mailto:jesper.lagergren@ki.se)

The research was funded by the Swedish Research Council and the Swedish Cancer Society.