

Impact of a multidisciplinary standardized clinical pathway on perioperative outcomes in patients with oesophageal cancer

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BACKGROUND: Defined clinical pathways can contribute to improved outcomes in patients undergoing oesophageal cancer surgery. A standardized oesophagectomy clinical pathway (SOCP) established at the Virginia Mason Medical Center (VMMC) in Seattle, Washington, USA was introduced into the Royal Surrey County Hospital (RSCH), Guildford, UK in 2011. The aim of this study was to see whether transfer and implementation of an oesophagectomy care pathway could change postoperative outcomes significantly.

METHODS: Three consecutively accrued study groups were examined at the RSCH: patients operated on immediately before the introduction of the SOCP (group 1), patients operated on after the introduction of the SOCP but not included in the pathway (group 2), and patients managed according to the SOCP (group 3). Outcomes were compared with those of patients who had surgery at the VMMC between 2009 and 2011 using the SOCP (group 4).

RESULTS: There were 12 patients in each of the first three groups and 74 in group 4. All groups were similar with respect to body mass index, medical co-morbidities and clinical stage. The median age of patients in group 3 was significantly lower than that in group 1, and median American Society of Anesthesiologists score was significantly better in group 3 compared with group 4. Following initiation of the SOCP there was an increase in immediate extubation (8 of 12 in group 1 versus 12 of 12 in group 3) and first-day mobilization (1 of 12 versus 12 of 12 respectively), and a reduction in complications (9 of 12 versus 4 of 12), length of critical care stay (4 (range 2-20) days in group 1 versus 3 (1-5) days in group 3) and length of hospital

stay (17 (12-30) to 7 (6-37) days respectively). Patients not on the pathway but who had surgery during the same interval experienced small but non-significant improvements in length of critical care and hospital stay, and in first-day mobilization.

CONCLUSION: The study demonstrated improvement in short-term outcomes after oesophagectomy following the adoption of an established multidisciplinary standardized postoperative pathway.