

Enhanced recovery in the resection of colorectal liver metastases.

Dunne DF(1), Yip VS, Jones RP, McChesney EA, Lythgoe DT, Psarelli EE, Jones L, Lacasia-Purroy C, Malik HZ, Poston GJ, Fenwick SW. *J Surg Oncol.* 2014 Aug;110(2):197-202. doi: 10.1002/jso.23616. Epub 2014 Apr 8.

BACKGROUND: There is limited evidence for the use of enhanced recovery after surgery (ERAS) in patients undergoing hepatectomy, and the impact of the evolution of ERAS over time has not been examined. This study sought to evaluate the effect of an evolving ERAS program in patients undergoing hepatectomy for colorectal liver metastases (CRLM).

METHODS: A multimodal ERAS program was introduced in 2/2008. Consecutive patients undergoing hepatectomy for CRLM between 2/2008 and 9/2012 were included in the study. Data were collected prospectively. Retrospective analysis compared an early ERAS cohort (2/2008-4/2010) with a later cohort with a matured ERAS program (5/2010-8/2012).

RESULTS: Length of stay reduced as experience of ERAS increased (Log-rank χ^2) = 10.43, $P = 0.001$). Although median length of stay remained unchanged (6 days), the probability of hospitalization beyond 10 days was 25% in the early cohort compared with 7% in the later cohort. Critical care utilization reduced over time (75.5% vs. 54.7%, $P < 0.0001$). Complications occurred in 38.2%, with no difference in between cohorts. One postoperative death occurred in the early cohort (<0.3%).

CONCLUSIONS: This study suggests that as experience of ERAS evolves, there is a progressive reduction in hospitalization and critical care admission. This is without any increase in morbidity and mortality.