

P-POSSUM over-predicts morbidity in patients undergoing open liver resection

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Introduction: A study by Whiteley et al in 1998 suggested that the Physiological and Operative Severity Score for the enumeration of Morbidity and Mortality (POSSUM) over-predicted mortality (especially in low risk patients). This led to the development of (Portsmouth - POSSUM) scoring system in an attempt to counteract this. The last 20 years have seen significant advances in surgical techniques and perioperative management leading to a reduction in morbidity and mortality for many different surgical specialties. We examined the use of P-POSSUM scoring to predict outcomes in patients undergoing elective liver resection surgery at our centre.

Method: P-POSSUM scores and mortality and morbidity figures were collected for 92 patients as part of a larger trial. SPatients were allocated to 5 different morbidity risks.ZThe number of patients predicted to suffer postoperative morbidity/mortality in each group was compared with the actual number of patients observed to have postoperative morbidity/mortality.

Results: P-POSSUM significantly over-predicted the total number of patients that would suffer postoperative morbidity (50 versus 22 patients who actually suffered morbidity, $p < 0.001$). P-POSSUM was more accurate in predicting morbidity in lower risk patients than higher risk patients, where it significantly over-predicted morbidity in both the 40-59% and 60-79% risk groups ($p = 0.032$ and $p = 0.001$ respectively). Overall mortality was accurately predicted by P-POSSUM (four versus two patients who actually died, $p = 0.6826$).

Conclusion: P-POSSUM appears to be good at predicting mortality but over-predicts morbidity in open liver resection.

Biography

Rassam Ziyad has completed his Primary medical degree from Al-Mustansiriya University, 1993 and postdoctoral studies from Baghdad University School of Medicine, 1996. He is a Fellow of the Royal College of Anesthetists, England, 2009. He has served a year as a clinical and research fellow in anesthesia for high risk surgery at Royal Surrey County Hospital in Guildford, UK.

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