

## **POSSUM, a Potentially Useful Tool for Prediction of Morbidity in Patients Undergoing Central Pancreatectomy**

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### **Abstract**

*Aim:* Central pancreatectomy is a pancreas-sparing alternative to standard pancreatic resections, and it is associated with substantial morbidity. The aim of the present study is to assess the utility of the POSSUM scoring system in the prediction of the postoperative complications after central pancreatectomy, which would help identify the patients who are at the highest risk of developing complications.

*Methods:* A retrospective analysis of 24 patients who underwent central pancreatectomies (2002 – 2010) was performed. The POSSUM score was calculated for each patient and was correlated with observed morbidity.

*Results:* The mean POSSUM score was 32, thus predicting morbidity in 9 out of 24 patients. This risk assessment proved to be quite accurate, as 13 patients (54%) actually developed postoperative complications (chi-squared = 3.2101, p = 0.073). The predictive value of the POSSUM was strongest for the  $\leq 20\%$ , 60 – 80% and  $\geq 80\%$  morbidity risk cohorts (O/ E ratio 1).

*Conclusions:* The identification of a scoring system to predict the development of severe complications after central pancreatectomy may stratify the patients' risk and lead to a tailored approach of this surgical procedure. Although POSSUM seems to predict morbidity after central pancreatectomy, further studies involving larger numbers of patients should be conducted to confirm this effect.

**Key words:** audit, risk adjustment, POSSUM, pancreatectomy, operative morbidity

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