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Relationship between post-operative cognitive dysfunction and regional cerebral oxygen saturation and β-amyloid protein

Key words:

Laparoscopic pancreaticoduodenectomy, Post-operative cognitive dysfunction, Regional cerebral oxygen saturation, β-amyloid protein

Summary

This article mainly focused on the correlation of post-operative cognitive dysfunction (POCD) and rSO_2 and Aβ in patients undergoing laparoscopic pancreaticoduodenectomy.

- The development of POCD is associated with rSO_2 and Aβ.
- rSO_2 might be useful in the prediction of POCD.
- Aβ might be used as a sensitive biochemical marker to predict the occurrence of POCD.







Innovation points

- The $rSO_{2\%max}$ value of over 10.2% might be a potential predictor of neurocognitive injury for those patients.
- plasma A β might be a potential biomarker for POCD.

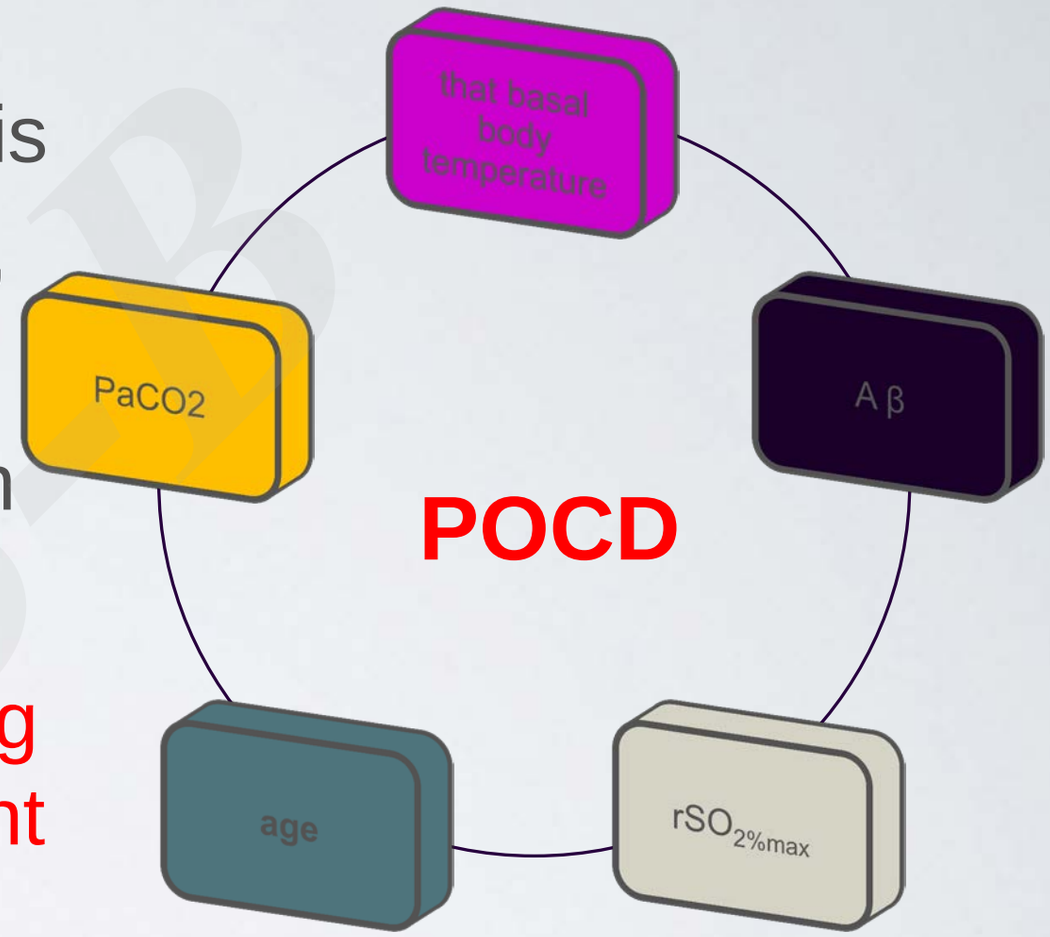






Innovation points

◆Multivariate logistic regression analysis has shown that basal body temperature, PaCO2, $rSO_{2\%max}$ and Aβ seem to play more important role for the interpretation of POCD.



◆Routine blood gas analysis, monitoring of rSO_2 and detection of plasma Aβ might be useful tools for predicting the occurrence of POCD.

