

Surgeons' preference for off pump or on pump coronary artery bypass grafting surgery: different level, different strategy?

Guangpu Fan¹, Xuan Wang¹, Chen Chen¹, Jing Liu¹, and Yu Chen¹

¹Peking University People's Hospital

January 30, 2024

Abstract

Background: Surgeon's preference is an important factor in clinical strategy for off pump (OPCAB) or on pump (ONCAB) coronary artery bypass graft (CABG) surgery. This study analyzed the surgeons' understanding and the propensity for both techniques. Methods: A self-reported questionnaire survey was performed. Two sections were included : (1) Q1 questionnaire: to investigate the surgeon's opinion on the indications of OPCAB and ONCAB; (2) Q2 questionnaire: to investigate the surgeons' choice of OPCAB or ONCAB in different clinical situations. Results: The questionnaires were sent to 169 surgeons. In Q1 questionnaire, 71.2% surgeons surveyed chose the option which represents that the degree of overlap between the indications of OPCAB and ONCAB would be greater than 70%. 55.1% surgeons believed that OPCAB had a wider scope of indications than ONCAB, while 35.3% surgeons believed that ONCAB had more extensive indications than OPCAB. In Q2 questionnaire, more than 70% of surgeons surveyed chose OPCAB for patients at high risk of stroke, with renal dysfunction, pulmonary dysfunction, malignancy, clotting and coagulation disorders or octogenarian patients, while more than 57.5% of surgeons surveyed chose ONCAB with the conditions of poor target vessels, ventricular enlargement and dysfunction. 87.5% surgeons made the choice of ONCAB for novice surgeons. Conclusion: Most surgeons surveyed agreed that OPCAB and ONCAB are suitable for most of the patients. Surgeons are more willing to choose ONCAB when facing complicated heart conditions, while choose OPCAB in the presence of more serious concomitant diseases.

Hosted file

manuscript.docx available at <https://authorea.com/users/381472/articles/708871-surgeons-preference-for-off-pump-or-on-pump-coronary-artery-bypass-grafting-surgery-different-level-different-strategy>