

Coronary surgery in acute coronary syndrome

Akut koroner sendromda koroner cerrahi

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We read with great interest the article written by Kaya et al.^[1] on the outcome of off-pump coronary surgery in acute coronary syndrome (ACS). In this study, the authors reported that off-pump surgery in ACS was safe, due to less inflammation and less global ischemia. However, when the results of the study are examined, we are unable to make such a conclusion. In this study, it is obvious that no parameters related to inflammation were examined. We believe that such an inference should not be made on data that is not in the work.

On the other hand, the current literature continues to discuss the potential damage of cardiopulmonary bypass in coronary artery bypass grafting. In several studies, the results of the off-pump surgery were found to be better for some parameters, due to the inflammatory response activated by cardiopulmonary bypass.^[2] However, in many studies, no difference between the two techniques in terms of short- and mid-term results is available.^[2,3] Some authors even reported that off-pump surgery (surgeons) increased mortality.^[4] A meta-analysis of studies comparing off-pump and on-pump surgery in specifically ACS reported no difference in early mortality between the two techniques.^[5] The same meta-analysis showed that off-pump surgery had shorter intensive care unit stay and the hospitalization period. It was reported that there was no difference in the postoperative respiratory failure, renal failure, intra-aortic balloon

pump requirement, stroke, atrial fibrillation, amount of red-cell transfusion, reoperation for bleeding, sepsis or sternal dehiscence between off-pump and on-pump groups. Moreover, it was reported that the on-pump surgery was much better in terms of postoperative inotropic requirement and complete revascularization of the target vessels. In the aforementioned meta-analysis, the authors also found no evidence suggesting that off-pump was better in acute coronary syndrome. Although the mean time from the onset of angina symptoms to surgery was stated in the article, it was not mentioned whether the authors had different strategies according the surgery time in various clinical presentations of ACS; for instance, did they use the same time strategy for patients with unstable angina and for patients with ST-segment elevation myocardial infarction? Therefore, we believe that the opinions of the authors' about this issue would add a value to their study.

Declaration of conflicting interests

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REFERENCES

1. Kaya E, Isık O, Fotbolcu H, Yakut C. Our experience with complete revascularization on beating heart in patients with acute coronary syndrome. *Turk Gogus Kalp Dama* 2016;24:666-71.
2. Fudulu D, Benedetto U, Pecchinenda GG, Chivasso P, Bruno VD, Rapetto F, et al. Current outcomes of off-pump versus on-pump coronary artery bypass grafting: evidence from randomized controlled trials. *J Thorac Dis* 2016;8(Suppl 10): S758-S771.
3. Lamy A, Devereaux PJ, Prabhakaran D, Taggart DP, Hu S, Paolasso E, et al. Off-pump or on-pump coronary-artery bypass grafting at 30 days. *N Engl J Med* 2012;366:1489-97.



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4. Møller CH, Penninga L, Wetterslev J, Steinbrüchel DA, Glud C. Off-pump versus on-pump coronary artery bypass grafting for ischaemic heart disease. *Cochrane Database Syst Rev* 2012;3:CD007224.
5. Harling L, Moscarelli M, Kidher E, Fattouch K, Ashrafian H, Athanasiou T. The effect of off-pump coronary artery bypass on mortality after acute coronary syndrome: a meta-analysis. *Int J Cardiol* 2013;169:339-48.

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