

THE IMPACT BASE ON UNIT BLOOD TRANSFUSION ON MORBIDITY AFTER CARDIAC SURGERY

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Objective: To analyze the impact of blood transfusion on the incidence of clinical outcomes post operatively after cardiac surgery base on blood units.

Methods: The methodology followed was a retrospective multi-central study. We analyzed 597 adult patients undergoing coronary artery bypass graft (CABG) or valvular operations in three university hospitals in Shiraz between September 22, 2012 and March 19, 2013. We compared post-operative complications between patients with non-transfusion (n=72), 1-2 units transfusion (n=333) and >2 units transfusion (n=192). We considered significant variables with P<0.05.

Results: Patients who received more units of blood transfusion had longer extubation times (8.51±3.12 vs. 9.47±3.44 vs. 11.18±4.77 hours, P<0.001), length of hospital stay (4.5±0.76 vs. 4.66±1.06 vs. 4.89±1.43 days, P=0.036) and more total post-operative bleeding (727.36±490.65 vs. 845.02±535.27 vs. 1018.15±690.27 cc, P<0.001). However, length of ICU-stay, low cardiac output, cerebrovascular events, pulmonary and infection events didn't show any difference between three groups.

Conclusion: The more units' blood transfusion is associated with increased time of extubation and length of hospital stay as well as increased post-operative bleeding.

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