

The effect of tranexamic acid in reduction of bleeding in coronary artery bypass grafting

K.Kazem-Nejad (MD)

*Department of Anesthesiology
Gorgan University of Medical Sciences*

M.Ghergherechi (MD)

*Faculty of Anesthesiology group
Army University of Medical Science*

Corresponding Author:

K.Kazem-Nejad

E-mail: kazemmeja1341@yahoo.com

Abstract

Background&Objective: The main cause of the cardiovascular disease is atherosclerosis of coronary artery. One of therapeutic methods of the disease is coronary artery bypass graft (CABG). One of the main complications of CABG is bleeding after grafting. Different methods and proposed for preventing or reducing the bleeding. The aim of this study is to evaluate the effects of tranexamic acid (TA) on reduction of bleeding after grafting.

Materials&Methods: This study was a randomized clinical trial. 100 patients conditanted to CBG divided into 2 groups randomizely (50 for control and 50 for subject). TA was injected to subject group twice with the same dosage of 15 mg/kg: first during the operation and second after ending the cardiopulmonary pump and neutralizing the therapeutic effect of heparin by protamin. The same method was used for the control group, except normal saline was used instead of TA variations such as bleeding rate, PT, aPTT were tested after CABG. The extracted data was analysed by SPSS software.

Results: The range of ages was 28 to 75 years and the control and subject groups were distributed normally from age viewpoint. Bleeding rate after grafting in subject group was 335 ± 45 ml and in control group was 490 ± 81 ml. in case and control platelet count and hematocrit groups, were significant differences ($P < 0.05$).

Conclusion: Using TA during and after CABG is suggested to control bleeding.

Key Words:

Tranexamic acid - Coronary artery bypass graft (CABG)- Ischemic heart diseases- Operation