surgery, even moderate doses of TXA have resulted in two times increase in the rate of seizure and mortality (25). A trial showed no difference between the efficacy of high and low dosage of administrated TXA on bleeding and transfusion requirements (26). In one survey, about 5.4 mg/kg as the loading dose, 50 mg as the prime dose and 5 mg/kg/h as the amount of infusion were considered as the optimum doses which sustained a steady plasma concentration of above 20 µg/ml. The mentioned doses should be modified in renal deficiency condition (27).

In conclusion, due to the severe risks and high cost associated with blood products and transfusion method, applying TXA has been known as the most comprehensive strategy for decreasing blood transfusion requirements and preserving blood content which has caused considerable health and economic benefits for countries. There is enough evidence to approve the use of antifibrinolytic agents in cardiac surgeries. Different clinical trials have shown the efficacy of TXA on blood transfusion, although the changing rate of mortality and thromboembolysis is yet under debate. Due to low percent of thromboembotic events in trials, obtaining a comprehensive conclusion regarding altered rate of this events by administrating TXA is difficult. Despite the better understanding about TXA effect in cardiac surgery, it is still difficult to predict the possibility of occurrence of TXA side effects in individual patients due to various genetics for fibrinolysis and thrombolysis situation.

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Conflict of Interest

The authors declare no conflict of interest.

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