Recombinant activated factor VII for refractory bleeding after cardiac surgery - A retrospective analysis of safety and efficacy


Objective
Analysis of safety and efficacy of recombinant activated factor VII (rFVIIa) used as the last resort for refractory bleeding after cardiac surgery.

Design
Retrospective cohort analysis and matched pairs analysis with historic controls were performed. In the rFVIIa group, which also received conventional hemostatic therapy, data were collected for a median of 14 hrs from admission to the intensive care unit (ICU) to the administration of rFVIIa and for the following 24 hrs. In the control group, which received only conventional hemostatic therapy, data were collected for 14 and then for 24 hrs after admission to the ICU.

Settings
University hospital.

Patients
Twenty-four patients matched with historic controls.

Interventions
None.

Measurements and Main Results
No thromboembolic complications were observed in the rFVIIa group. Blood loss and transfusion requirements were significantly reduced in the period after the administration of rFVIIa. However, in the 24-hr period after rFVIIa administration, blood loss (p=0.140) and transfusion of packed red blood cells (p=0.442) and fresh frozen plasma (p=0.063) were not different between the rFVIIa and control groups. Platelet concentrates (p=0.004) were transfused less in the control group. Mortality and 6-month survival rates were not different between the groups.

Conclusions
When used as a last resort, rFVIIa was safe but not incrementally efficacious over conventional hemostatic therapy.

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