

## **Recombinant Activated Factor VII in Controlling Bleeding in Non-Hemophiliac Patients**

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**Objective:** To evaluate the use of recombinant factor VIIa (rFVIIa) in non-hemophiliac patients who had severe blood loss due to major trauma associated with extensive organ damage and received multiple blood transfusions.

**Design:** Retrospective study.

**Setting:** Alnoor Specialist Hospital, Makkah, Saudi Arabia.

**Method:** Medical records of patients who received rFVIIa from November 2007 to May 2011 were reviewed. Data collection included personal characteristics, diagnosis, indications, comorbidities, amount of blood products used with rFVIIa, dose of rFVIIa, mortality and adverse events.

**Result:** Forty-four patients were reviewed, 30 (68.18%) males and 14 (31.81%) females. The median age was 34.7 years. The median dose of rFVIIa was 5.2 mg (range, 2.4-8.2 mg). Seven (15.9%) patients needed a second dose of rFVIIa (range, 6-7 mg).

There was a marked and significant reduction in transfusion requirements for packed red blood cells, fresh frozen plasma, platelets and cryoprecipitate. Twenty-two patients (50%) died and the median APACHE score was 46 (range, 18-69).

Eleven units (U) of packed RBCs (R), 9.2 U of platelets (P), 15.4 U of fresh frozen plasma (F) and 5.8 U of cryoprecipitate (C) were required as a pre-treatment compared to post treatment of an average of 3 U R, 5.1 U P, 4.7 U F and 2.4 U of C.

**Conclusion:** Our study showed that the early use of rFVIIa was associated with decreased 50-day mortality in non-hemophiliac patients who have experienced heavy blood loss and who have received multiple blood transfusions with haemostatic changes without success. The early use of rFVIIa was associated with marked reduction in the transfusion requirements.

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