ROLE OF RECOMBINANT FACTOR VIIa IN THE MANAGEMENT OF SEVERE PERIOPERATIVE BLEEDING IN CARDIAC SURGERY, QATARI

Introduction: Intractable bleeding is one of common adverse events after cardiac surgeries. Recombinant activated factor VII (rVIIa) showed efficiency in controlling postoperative intractable bleeding (1). Its usage after cardiac surgeries should be more investigated.

Patients and methods: - All patients received rVIIa post cardiac surgeries over a period of two years were included in a retrospective descriptive study. All patients were evaluated for base line laboratory results and comorbidities, operative details, dose of rVIIa received, total chest drains pre and post rVIIa administration, total blood and blood products given pre and post rVIIa, post rVIIa laboratory results, complications of rVIIa, length of stay in intensive care unit.

Results: - We recruited 19 patients with a mean age of 49±18 years who received rVIIa in a dose of 90 mcg/kg. Packed red blood cells transfusion post rVIIa administration was decreased from mean of 10±6 units to 3.7±1.7 units P<0.0001. Chest drains post rVIIa administration were decreased from median of 2000 ml and IQR of 1200 to median of 500 ml and IQR of 500 P<0.1 . No complications related to rVIIa administration were observed.

Discussion: - The study highlight the following findings: Efficiency and safety of rVIIa in the control of intractable bleeding post cardiac surgeries. Usage of rVIIa saves blood bank resources, decreases the need of surgical reopening and decreases morbidity. More studies needed to elaborate clinical guidelines for the usage of rVIIa in the management of intractable bleeding post cardiac surgeries.

Conclusion: - There is increase need for clinical guidelines for the usage of rVIIa post cardiac surgeries. In our experience at Qatar heart hospital recombinant activated factor VII is safe and efficient treatment to control intractable bleeding post cardiac surgeries.