Effectiveness of fluid resuscitation on survival of uncontrolled hemorrhagic shock. (animal simulation)

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Background and Aims: Resuscitation of uncontrolled hemorrhagic shock cases is due to an appropriate method of replacing the lost blood. In this study we aimed to compare the resuscitation rate that occurs by prescribing normal saline serum, 5% hyper saline serum and no fluid prescription in an animal simulation model of uncontrolled hemorrhagic shock.

Methods: The same weight Makuian ecotype male goats sedated with ketamin and diazepam. The tracheostomy was done on the goats and were ventilated with portable ventilator. Right leg was amputated from knee , by crash manner. After bleeding exceed from 15 mg/kg , the goats were splited in to 3 resuscitation normal saline group (n=5), 5% hyper saline group (n=5) and no fluid prescription group (n=5). Data related to the duration of survival and rate of resuscitation were gathered and analyzed by spss 15.0.

Results: Significant increased mortality rate was observed in 5% hyper saline treated group. Duration of survival and rate of resuscitation in normal saline treated group and no fluid prescription group was significant.

Conclusions: Resuscitation with 5% hyper saline can lead to increased mortality in an uncontrolled hemorrhagic shock and does not improve survival and can increase rate of mortality.

Keywords: Normal saline serum; 5% hyper saline serum; Hemorrhagic shock