

POSTER PRESENTATION

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Correlation between ffp transfusion and apache ii score in icu patients

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Introduction

While plasma donation is still necessary as a unique source of human proteins and to treat coagulation disorders, FFP administration seems to have high rate of inappropriate indication. After all, FFP transfusion is not risk free, and is associated with lung injury, infectious disease and circulatory overload in recipients. On the other hand, high severity grade patients may have impaired physical status and increased demand for FFP transfusion.

Objectives

The aim of our retrospective observation study was to test the hypothesis that a correlation exists between FFP transfusion and APACHE II score on admission, in our both medical and surgical ICU served in community hospital.

Methods

From January 2006 to June 2014 admitted to our ICU 620 patients, mean age 64.8 years, mean length of ICU stay (LOS) 14.2 days, mean mechanical ventilation duration per ventilated patient (V. Days) 12.23 days, mean APACHE II score on admission 21.2, predicted mortality 38.9 %, actual mortality 31.45 %, Standardized Mortality Ratio (SMR) 0.80. From our database we looked for age and the following values and indexes according FFP transfusion per year from 2006 to 2014 (mean values). Total, per patient, per hospitalization days (HD), per patient under mechanical ventilation (pts V) and per ventilation days (VD) Using linear correlation method, we looked for linear slope, correlation coefficient (r), and coefficient of determination (r^2), and by linear regression method using ANOVA test we looked for p value, according APACHE II score and FFP transfusion.

Results

Table 1 Correlation between APACHE II score and FFP.

FFP	Slope	r	r^2	S. Error	Lower C.I.	Upper C.I.	p value
Total	1.740	0.1939	0.0376	3.327	-6.129	9.608	0.6171
Per parienr	-0.049	-0.328	0.1077	0.054	-0.176	0.078	0.3885
Per Hosp. Day	-0.005	-0.495	0.2457	0.003	-0.014	0.003	0.1746
Per pt ventilated	-0.005	-0.353	0.1252	0.056	-0.190	0.077	0.3503
Per Vent Day	-0.006	-0.427	0.1828	0.005	-0.019	0.005	0.2511

Conclusions

According to our data, there was no statistically significant correlation detected between APACHE II score and FFP transfusion indexes. Our data suggest that even though some high severity grade patients may need more FFP than others, FFP transfused do not correlate statistically significant with APACHE II score on admission in ICU patients.

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