"Determination of a thromboelastographic profile in patients undergoing congenital cardiac surgery"

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Abstract:
We studied the thromboelastographic (TEG) profile of 27 patients undergoing pediatric cardiac surgery in a 10 month period from July 2012 to April 2013, at the Cardiovascular Surgery Division of the National Institute of Pediatrics, Mexico.

Introduction:
Conventional coagulation essays have certain limitations for intraoperative bleeding monitoring of patients undergoing congenital heart surgery 1-2

Thromboelastography (TE) is an alternative useful in non-cardiac surgical procedures such as liver transplant, which is associated with several bleeding disorders; nevertheless, only few studies analyze its role in pediatric cardiac surgery 3

Methods:
A TEG determination was performed in two moments for every patient: Basal (sample obtained as soon as the central catheter was installed) and rewarming (at 32°C after the administration of 150 ml of plasma on pump).

Range of age of 0-17 years.

Results:
59.3% of the population were females and 40.7% were males (age mean 4.9). The most common surgical procedures were partial anomalous venous drainage (18.5%) and pulmonary artery and tricuspid valve anomalies (pulmonary stenosis, pulmonary atresia, tricuspid atresia) (14.8%)

Main results of the TGE parameters are shown in Table 1.

Conclusions:
We conclude that TE is a very valuable monitoring technique for blood coagulation surveillance of patients undergoing cardiac surgery in pediatric population allowing anticipatory measures for bleeding control.

References:
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