



Age-related differences of coagulation profiles in Children and Neonates

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Abstract

Objective: The hemostasis system in neonates and infants is characterized by functional immaturity due to age-specific differences in proteins. The aim of this study was to identify clinical significance age specificity in pediatric coagulation profile. **Materials and Methods:** We assessed the coagulation tests (aPPT, PT, fibrinogen level, INR) in the solid-core sampling among the patients admitted into cardiovascular PICU. From January 2019 to December 2019, 842 patients were managed. We compared three age groups: neonates (neo. <30 d), n=132; infants (inf. < 12 m), n=367; and children (child. > 1 y), n=343. For statistics we used nonparametric computations. **Results:** Then we analyzed the raw data we found that PT (m ±SD) in neonates, infants, and children was 11.83±1.118, 11.75±1.302, and 12.25±1.071, respectively. PT in infants was significantly less than in children group, p<0.05. **Conclusion:** The hemostasis system in children has dynamic development and before any preventive or treatment intervention we should assess initial coagulation profile with regard to age-dependent specificity.

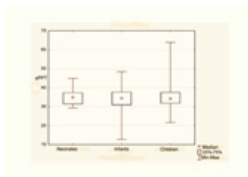


Fig.1. PT levels in different age groups

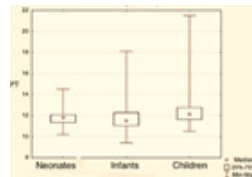


Fig.2. aPPT levels in different age groups

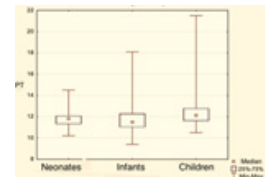


Fig.3. FG levels in different age groups

Biography

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Publications

1. Anti thrombotic therapy in children
2. Efficiency of Endovascular Haemostasis at Delivery in Patients with Previa and Placenta Invasion

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