

levels above the blood transfusion threshold in the majority of our VLBW infants before hospital discharge.

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### USEFUL EVALUATION OF THROMBOELASTOGRAPHY FOR COAGULATION DISORDERS IN CRITICALLY ILL PATIENTS

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**Background and aim:** Many of inflammation mediators are involved in the coagulation proteins activation. Then aim of study was evaluated useful of thromboelastography for coagulation disorders diagnosis in critically ill patients.

**Methods:** By a serial cases design, we realized during three months a study with patients in critical state during stay in a pediatric intensive care unit. Every patient blood sample (1 ml) was obtained by venous peripheral puncture, carrying out analysis with a digital thromboelastograph, using for processing two types of reagent; unique (kaolin) or cocktail (kaolin+heparinase). Dynamics of clot was analyzed by seven indicators and for comparison we established groups for gender, pathology, infection and type attention condition. Data analysis was by non parametric statistics.

**Results:** We included 53 samples of a similar number of patients. Most frequent boss of coagulation disorder was hypocoagulation state (31/58.94%). Sensibility test was 82% with 76% specificity. Time for achieve force of clot showed difference ( $p=0.049$ ) between patients with or without infection, as well as, in alpha angle ( $p=0.039$ ), maximum clot extend ( $p=0.40$ ), global clot ( $p=0.025$ ) and in index of coagulation ( $p=0.036$ ) in agreement to the type of reagent. Difference not exist ( $p>0.05$ ) between boys and girls, or by surgical and clinical conditions.

**Conclusions:** Thromboelastography is a useful tool for coagulation disorders diagnosis in critically ill patients. We suggest and promote his rationale use in more pediatric disorders and conditions. This avoid unnecessary transfusions and reduce cost of hospitable stay.

**Key words:** pediatric, hemostasia, coagulation disorders, laboratory tests, intensive care.

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### NATIONWIDE FRENCH SURVEY ON THE ANALGESIC MANAGEMENT OF PAINFUL SICKLE CELL CRISIS IN THE PEDIATRIC EMERGENCY DEPARTMENT

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The French National Authority for Health (HAS) published in 2005 recommendations for the management of sickle cell disease in children. Are they implemented in Emergency Departments (ED)? Which are the analgesics used in ED for painful vaso-occlusive episode (PVOE) in children?

**Objective:** To determine the current management of PVOE in French pediatric ED.

**Methods:** A questionnaire on the management of PVOE was sent to all French pediatric ED.

**Results:** Eighty-five of 111 (76.6%) requested ED responded to the survey. The chiefs of 81.9% of ED reported having read the HAS recommendations. Fifty-three of 84 (63%) centers reported using nalbuphine for moderate PVOE. Intravenous morphine was used by 72 out of 83 (87%) centers for severe PVOE. Morphine use was reported by 91.5% of ED. Sixty seven percent of centers reported a titration of morphine in more than 60% of children. Patient Controlled Analgesia with morphine was reported in 45.8% of centers. In case of severe PVOE, only 31.4% thought that more than 60% of children were relieved with intravenous nalbuphine whereas 91.9% thought that this rate of relieve was obtained with intravenous morphine. Concerning nitrous oxide/oxygen, 69.9% of physicians declared that it was used for more than 60% of intravenous lines placements and 46.2% of physicians reported its use to increase continuous analgesia when morphine was insufficient.

**Conclusion:** Most French ED declare to follow the HAS recommendations. Nalbuphine is the most commonly used opioid for moderate PVOE and morphine for severe PVOE. Nitrous oxide/oxygen is widely used for PVOE.