“Aim of this study was to report the bleeding risk in pediatric patients with thrombocytopenia who underwent positioning of CVC” Olivieri et al (2015).

Reference:

Central venous catheter placement in children with thrombocytopenia http://ctt.ec/pwW5b+ @ivteam #ivteam

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Abstract:

AIM: The use of central venous catheter (CVC) is essential in the management of chronically ill children. Thrombocytopenia is a common haematological finding in these patients, with an increased risk of bleeding during the insertion of CVC. No clear guidelines are reported regarding the CVC positioning in patients with disorders of hemostasis, and prophylactic platelet (PLT) transfusions are still controversial. Aim of this study was to report the bleeding risk in pediatric patients with thrombocytopenia who underwent positioning of CVC.

METHODS: A retrospective single-center study of all CVCs surgically inserted over a 2-year period (April 2011 - April 2013) at our institution was performed. Age, gender, diagnosis, type of CVC, haematological values (haemoglobin and PLT count, prothrombin international normalized ratio, active partial thromboplastin time) and post-operative bleeding complications were compared between patients with PLT count below (group A) and above 50 x 10^9/L (group B).

RESULTS: Seventy-two CVC procedures were performed in 67 patients, with a median age of 45 months. Of these, 25 (35%) catheters were positioned in 25 patients included in group A and the remaining 47 (65%) in 42 patients in group B. All twenty-five cases in group A received a prophylactic PLT transfusion prior to the procedure. Bleeding complications were reported in only two cases in group A (8%).

CONCLUSIONS: CVC placement in pediatric patients with thrombocytopenia can be safely performed. We believe a randomized multicenter study could be necessary to determine the benefit of PLT transfusions in children with a PLT count below the recommended level of 50
x 10⁹/L.

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