

Abstract

Reactions and platelet increments after transfusion of platelet concentrates

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Introduction: Starting november 2001 all platelet concentrates (PCs) prepared by the regional Sanquin bloodbanks are tested bacteriologically. As a result all PCs were delivered with a negative culture screen. Without culture screen, the reported incidence of febrile reactions after transfusion of PCs is approximately 4,5%¹. Within the framework of haemovigilance, we evaluated the incidence of febrile reactions and the accompanying pitfalls after PCs transfusion.

Methods: All PCs ordered for patients in the haematology ward were provided with an evaluation form. Clinical parameters, laboratory results and patient reactions before and after transfusion were recorded.

Results and discussion: Adverse effects in 31 patients (M/F: 20/11) following 212 transfusions were evaluated. Incidence of transfusion reactions: Fever (>1°C): 0,5%; Rash: 1,4% and Urticaria 0,9%. We also observed a drop in systolic blood

pressure (>20 mm Hg): 6,1%. The mean platelet increment after 1h was $14,6 \pm 13,3$ (\pm SD $10^9/l$). Compared with results in literature there is a considerable decrease in febrile reactions. This might be related to the delivery of PCs with a negative culture screen. Nursing staff did recording of data without any problems.

Conclusion: Bacteriological screening of PCs may decrease the incidence of febrile reactions after transfusion.

Referentie

Wildt-Eggen J de, Nauta S, Schrijver JG, Marwijk Kooy M van, Bins M, Prooijen HC van. Reactions and platelet increments after transfusion of platelet concentrates in plasma or an additive solution: a prospective, randomized study. *Transfusion*. 2000; 40: 398-403.