Thesis Title PLATELET CROSSMATCHING FOR THE ALLOIMMUNIZED PATIENT

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ABSTRACT

In this study, the standard lymphocytotoxicity assay (LCT) and the mixed passive haemagglutination test (MPHA) were used in retrospective platelet crossmatching for the detection of compatible random donor plateletes for multiple transfusion patients who were suspected of having refractoriness to platelet transfusion. Thirty-seven episodes of pooled random donor platelet transfusions were evaluated in 30 patients. Effectiveness of the transfusion was assessed by the posttransfusion corrected platelet count increment (CCI), determined at 1 hour. When both assays were used in combination, the concordant results were significant in correlation with the CCI ($p<0.05$) and the outcome of the transfusions was correctly predictive in 22/26 transfusions (88%). When both tests were combined, the sensitivity was higher (91%) than the sensitivity in LCT and MPHA alone. This study suggested that when the failure of platelet transfusion occurs after using LCT, the MPHA should be used in comination to solve the problem.