INTISARI

Latar Belakang: Transfusi trombosit merupakan salah satu terapi untuk pasien penderita trombositopenia dan disfungsi trombosit. Transfusi trombosit memiliki resiko terjadinya reaksi transfusi pada pasien dikarenakan adanya lekosit pada konsentrat trombosit. Lekodeplesi merupakan suatu proses dimana lekosit dihilangkan dari komponen darah dan merupakan salah satu langkah untuk mengurangi efek samping yang ditimbulkan dari lekosit kepada pasien. Salah satu indikator adanya lekosit dalam komponen transfusi trombosit adalah enzim myeloperoksidase.

Tujuan: Penelitian ini bertujuan untuk mengetahui perbedaan kadar enzim myeloperoksidase pada konsentrat trombosit lekodeplesi dan konsentrat trombosit non lekodeplesi.

Metode: Penelitian ini menggunakan data sekunder dengan desain *cross-sectional*. Sampel diambil dari data penelitian Efikasi dan Risiko Transfusi Trombosit" yang memenuhi kriteria inklusi dan kriteria ekslusi. Sampel terdiri dari 16 kelompok konsentrat trombosit lekodeplesi dan 16 kelompok konsentrat non lekodeplesi. Pengukuran kadar enzim myeloperoksidase dilakukan pada sampel Tc *pre-storage* yang diperoleh dengan menggunakan metode *consecutive sampling*. Kadar enzim myeloperoksidase diukur menggunakan ELISA. Hasil dianalisa dengan menggunakan uji t independent.

Hasil: Terdapat perbedaan kadar enzim myeloperoksidase pada konsentrat trombosit lekodeplesi dan konsentrat trombosit non lekodeplesi, p= 0,000 (p<0,05) dan perbedaan secara statistik signifikan.

Kata Kunci: Konsentrat Trombosit.Lekodeplesi.Enzim Myeloperoksidase

ABSTRACT

Background : Thrombocyte transfusion is one of the options of therapy for thrombocytopenia and thrombocyte dysfunction. Thrombocyte transfusion poses a risk of creating a transfusion reaction caused by leukocyte contained within the thrombocyte concentrate. Leukodepletion is a process in which the leukocyte is removed from the blood content and is one way of decreasing the adverse reaction on the patient. One of the indicators for the presence of leukocyte in thrombocyte concentrate is the enzyme myeloperoxidase.

Purpose : The objective of this study was to identify the level difference of myeloperoxidase in leukodepletion thrombocyte concentrate and non-leukodepletion thrombocyte concentrate.

Method : This research uses secondary data with cross-sectional design. The samples were obtained from the research "Efficacy and Risk of Thrombocyte Transfusion". The samples used have met the inclusion criteria and do not have exclusion criteria. Sample were consist of 16 leukodepletion thrombocyte concentrates and 16 non-leukodepletion thrombocyte concentrates. Measurement of the myeloperoxidase level was done unto Tc pre-storage samples which were obtained using the consecutive sampling method. The level of myeloperoxidase enzyme was measured using ELISA. The results were analyzed using independent sample t-test.

Result : There was a difference in the level of myeloperoxidase between the leukodepletion thrombocyte concentrate and non-leukodepletion thrombocyte concentrate. The p-value was 0,000 ($p<0,05$) and the difference was statistically significant.

Key word : Thrombocyte concentrate. Leukodepletion. Myeloperoxidase.