

## ABSTRAK

Blok sel adalah sisa endapan hasil sentrifugasi spesimen cairan sitologi eksfoliative yang dicetak dalam parafin. Penggunaan fiksasi untuk pemeriksaan blok sel berpengaruh terhadap hasil mikroskopis gambaran komponen suatu sel. Berbagai larutan fiksasi digunakan dalam pemrosesan blok sel oleh kebanyakan peneliti termasuk larutan formalin, tetapi bukan merupakan fiksasi yang memuaskan jika dilihat dari sudut pandang ahli sitologi. Pada topik ini, jenis penelitian yang digunakan adalah penelitian eksperimental, dengan populasi pasien penderita efusi cairan pleura di RSUD Dr. Soetomo Surabaya dan bahan uji berupa cairan efusi pleura. Penentuan besar sampel dihitung berdasarkan rumus *Frederer*, didapatkan jumlah total sebanyak 11 sampel dengan 33 perlakuan. Spesimen ditambah dengan mix fiksasi dan koagulan. Dilakukan penilaian gambaran komponen sel secara mikroskopis. Uji statistik yang digunakan adalah Kruskal-Wallis. Hasil penelitian penggunaan fiksasi alkohol dengan nilai sangat baik sebanyak 11 sampel dengan prosentase 100%, penggunaan mix fiksasi alkohol 100% : NBF 10% dengan nilai sangat baik sebanyak 10 sampel dengan prosentase 91%, nilai baik sebanyak 1 sampel dengan prosentase 9%, penggunaan koagulan plasma-thrombin dengan nilai sangat baik sebanyak 3 sampel dengan prosentase sebesar 27%, nilai baik sebanyak 6 sampel dengan prosentase 55%, dan nilai cukup sebanyak 2 sampel dengan prosentase 18%. Hasil dari pengujian statistic Kruskal-Wallis didapatkan nilai significant  $(p) = (0,000) < \alpha (0,05)$ , maka  $H_0$  ditolak dan  $H_1$  diterima yang artinya terdapat pengaruh penggunaan mix fiksasi dan koagulan antar kelompok perlakuan yang diujikan. Hasil penelitian dengan nilai sangat baik terbesar terdapat pada penggunaan fiksasi alkohol 100%.

**Kata Kunci : mix fiksasi, koagulan, blok sel, cairan pleura**

## ABSTRACT

Cell block is the residual sediment from exfoliative cytology liquid specimens printed in paraffin. The use of fixation for examination of cell blocks influences the microscopic results of the image of a cell component. Various fixation solutions are used in cell block processing by most researchers including formalin solutions, but it is not satisfactory fix when viewed from the point of view of the cytologist. On this topic the type of research used is experimental research, with a population of patients suffering from pleural fluid effusion in Dr. Soetomo Hospital Surabaya and the test material in the form of pleural effusion fluid. Determination of sample size is calculated based on Freederer's formula, obtained a total number of 11 samples with 33 treatments. The specimen is added with mix fixation and coagulant. Microscopic components of the cell are assessed. The statistical test used is Kruskal-Wallis. The results of the study used alcohol fixation with a very good value of 11 samples with a percentage of 100%, use of 100% alcohol fixation mix : NBF 10% with very good value as many as 10 samples with a percentage of 91%, good value as much as 1 sample with a percentage of 9%, the use of plasma-thrombin coagulant with very good value as many as 3 samples with a percentage of 27%, good value as many as 6 samples with a percentage of 55%, and sufficient value of 2 samples with a percentage of 18%. The results of the Kruskal-Wallis statistical test obtained a significant value  $(p) = (0,000) < \alpha (0,05)$ , then  $H_0$  was rejected and  $H_1$  was accepted, which means that there is influence of the use of mix fixation and coagulant between the tested treatment groups. The results of the study with the greatest excellent scores were found in the use of 100% alcohol fixation.

**Keywords : mix fixation, coagulant, cell block, pleural fluid.**