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Poster

## [P26-6] P26-6: Immunosuppressive drugs (5): Clinical practice

Chair: Hege Christensen, Norway

Tue. Sep 26, 2017 12:30 PM - 1:30 PM Annex Hall (1F)

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## [P26-6-4] Therapeutic drug monitoring improves efficacy of cyclosporine A in aplastic anemia patients

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Keywords: cyclosporine A, aplastic anemia, therapeutic drug monitoring, curative effect

### Background

Cyclosporine A is widely applied in treatment of aplastic anemia besides of immunological rejection after organ transplantation. Therapeutic drug monitoring has been proved to improve efficacy and reduce adverse reaction of cyclosporine A in organ transplantation. However, effect of therapeutic drug monitoring on clinical effectiveness of cyclosporine A in aplastic anemia patients has not been fully understood.

### Methods

A retrospective analysis was carried out to analyze the distribution of cyclosporin A concentration, frequency of follow-up visit and their effect on efficacy of cyclosporin A in 69 aplastic anemia patients (395 cases) from China-Japan Friendship Hospital in the past 3 years.

### Results

The average concentration of the 395 cases was  $185.85 \pm 173.42$  ng/mL, and only 145 cases (36.96%) were in the target range blood concentration. For the first monitoring result, concentrations of 23 patients (33.33%) reached the target range, while concentration of 32 patients (46.37%) was below the lower limit of target range. There is no significant difference among different age groups in the average concentration and proportions of reaching the target range ( $\chi^2 = 0.669$ ,  $v = 2$ ,  $p = 0.716$ ). Based on curative effect judgment standard, there were 27 cases treatment failed, 7 cases equally curative, 21 cases relieved, 14 cases marked improved, and total effective rate was 60.87%. We classified patients according to times of monitoring, and found effective rate was higher in patients with monitoring times at 4-10 than patients who received monitoring below 3 times ( $\chi^2 = 9.482$ ,  $v = 1$ ,  $p = 0.002$ ).

### Conclusions

The pharmacokinetics of cyclosporine A varied in aplastic anemia patients, and therapeutic drug monitoring helps to elevate the effective rate of cyclosporine A for aplastic anemia.