CHAPTER V

CONCLUSION

In these experiments it has been shown clearly that pharmacologic doses of glucocorticoid (prednisolone) had adverse effects on adrenocortical functions in 3 groups of the patients studied, i.e. nephrotic syndrome, rheumatic heart diseases and rheumatoid arthritis. These alterations in adrenocortical functions were interpreted by the change in the circadian rhythm of normal diurnal variation as well as the suppression of plasma cortisol levels and decreased 24 hour urinary 17-OHCS excretion which reflects the total cortisol production indirectly. The disturbed adrenocortical functions are influenced by the dose, duration and method of administration. These suppressed adrenocortical functions have been shown to be directly correlated to the dose and duration of steroid administration. However the method of steroid administration also plays an important role of adrenocortical suppression. This has been demonstrated in the patients with nephrotic syndrome who received different therapeutic regimen between every day schedule and every other day schedule. With the same doses of prednisolone (interpreted as mg/kg/day) and the same duration of therapy, those who received the oral prednisolone every day disclosed the more serious adverse effects on the adrenocortical function. The longer period of resting state (days interval without taking prednisolone) showed the less suppressive effects on the adrenocortical function.