CHAPTER VI

CONCLUSION

1. Of the 27 gout patients with renal insufficiency participated in this study, there were twenty-one men (92.6%) and two women (7.4%), the aged range was 42-79 years Ten patients had evidence of tophi (37.0%). All patients were received allopurinol in standard dose, 300 mg daily, completely for 6 weeks without any serious adverse events. There were no significant different in CrCl, serum creatinine, BUN, urine volume, creatinine excretion and proteinuria between before and after treatments. However, the proportions of patients with CrCl decrement $\geq$ 4 ml/min tended to increase in when patients with higher oxypurinol concentrations, eventhough these differences in proportions were not statistically significant among various ranges of oxypurinol levels. Since this study composed of small number of patients, further studies in larger number of patients are required to confirm this conclusion.

2. Most patients had both peak and trough plasma oxypurinol concentrations which were higher than the reference therapeutic range (5-15 μg/ml). There were significant directly linear correlation between oxypurinol concentration and changes of serum urate level after therapy. Serum urate of most patients approximately 70 percent could be controlled to less than 6 mg/dl goal after treatment, but only one patient out of ten patients with tophi had his serum urate controlled to less than 5 mg/dl. Therefore, for most patients, taking allopurinol 300 mg daily for 6 weeks was an effective dose to achieve serum uric acid level of less than 6.0 mg/dl which was the optimal serum uric acid for chronic gout patients without tophi. However, in patients with tophaceous gout which serum uric should be controlled to less than 5 mg/dl, this regimen of allopurinol might

not be considered as an effective dose. Since plasma concentrations seem to relate with efficacy, one might consider about increasing the dosages of those patients who have not reached the therapeutic target goals, especially if his/her plasma concentrations have not already been too high in the high risky levels.

3. Although, there was no significant relationship between oxypurinol concentration and change in CrCl, the proportion of patients with decrement in CrCl tended to increase with increasing oxypurinol concentrations. Therefore, standard dose of allopurinol should be used with caution especially when use for long term period in patient with renal insufficiency, especially if his/her plasma concentrations was in the high level ranges.

4. Serious adverse effects, especially AHS, were not developed during allopurinol treatment in this study. Only two patients developed mild side effects such as nausea vomiting, malaise, headache and dizziness. Nevertheless, since this study was covered for only 6 weeks, for long term allopurinol treatment in patients with renal insufficiency, sign and symptom of AHS should be carefully observed. Closely monitoring for fever, skin rash and any change in laboratory data of serum creatinine, BUN, CrCl, SGOT, SGPT, eosinophil are recommended.