

Thesis Title,                      Treatment of Urinary Tract Infection by  
   Andrographis paniculata compared with  
   Cotrimoxazole

Name                                      Uraisri Yimprang

Degree                                    Master of Science (Epidemiology)

Thesis Supervisory Committee -:

   Veerasing Muangman, M.D., F.I.C.S.,

   UROLOGIST

   Somchai Supanvanich, M.D., M.P.H.,

   M.P.H.&T.M.

   Vajira Singhakajen, B.A.(Stat), LL.B.,

   M.A.(Demog)

Date of Graduation                      24 February B.E. 2532 (1989)

#### ABSTRACT

Andrographis paniculata Nees., a herbal plant belonging to the Acanthaceae family popularly called "Fataleijone" in Thailand. The studies in the Chemistry, Pharmacology, Pharmacokinetics, Toxicology and clinical trials in China showed the antibiotic activity of this plant.

The present study is the clinical trial comparing the effects of Andrographis paniculata Nees. to Cotrimoxazole antibacterial drug in treatment uncomplicated urinary tract infection.

The sample group were patients attending urological clinic at Ramathibodi and Rajchavithi hospitals during May 10 through October 31, 1988. The size of samples were 60 patients with age ranged from 18 to 60 years old.

All 60 patients were selected to the experimental group and control group by systematic randomization. There were 30 patients in each group. The experimental group received *Andrographis paniculata* Nees. in powderized form within the gelatin capsule 500 mg./capsule at the dosage of 4 capsules 3 times daily for 7 days. The control group received Cotrimoxazole (Trimethoprim 80 mg. and Sulphamethoxazole 400 mg./tablet) at the dosage of 2 tablets twice daily for 7 days. Evaluation for the effectiveness of the drugs were done by recording the symptom, urine examination and urine culture at day one and day seven.

The results showed that the effective rate of treatment of dysuria in experimental group was 55.17 % and control group was 62.07 %. The statistical test showed no difference between two group. (p-value = 0.8039)

The effective rate of treatment of pyuria in experimental group was 55.56 % and control group was 57.14 %. The statistical test showed no difference between two group. (p-value = 0.8866)

The effective rate of treatment of bacteriuria in experimental group was 42.85 % and control group was 50.0 %. The statistical test showed no difference between two group. (p-value = 0.2485)

The total effective rate of treatment uncomplicated urinary tract infection as evaluated the sum of pyuria and bacteriuria in experimental group was 46.67 % and control group was 53.33 %. (p-value<sub>mn</sub> = 0.8524)