CHAPTER VI.

SUMMARY AND CONCLUSION

This study includes the identification of aerobic and other organisms such as mycoplasma, fungus and Trichomonas isolated from non-gonococcal urethritis patients. The susceptibility of these isolated organisms to the drugs were also tested with routinely used antibiotics. The selections of non-specific urethritis patients in these studied groups were followed the classical criteria with modification from the definitions of non-gonococcal urethritis by Shepard in 1968 (79). One hundred non-gonococcal urethritis male patients were studied in terms of the sexual history, symptoms and signs of urethritis as well as microorganism isolations, The numbers and types of isolated organisms from patients were compared to those isolated from control subjects. The controls were composed of 50 healthy sexually active males who had the same socio-economic status corresponding to the 100 non-gonococcal urethritis patients and 34 healthy children who had no history of sexual contacts. Approximately 85 percent of patients suffered from discharge and dysurea, and 98 percent of them showed signs of meatal inflammation. Almost all of them gave positive white blood cells in the first flow urine and urethral swab. The majority of patients showed symptoms in 7 days or more after the last coitus. The two control groups, have no urethral symptoms, although the 50 healthy males had the similar sexual activities to the patients.

After cleaning the glans penis, specimens from

the urethra were collected by three techniques e.g. urethral swab, paper point and first flow urine. All specimens were cultured on differential media. Comparing the three different techniques, mycoplasmas were isolated in the highest numbers by using urethral swabs and paper point. By centrifugation of the first flow urine, the culture had the lower numbers of mycoplasmas isolated.

In this studies, T - strain mycoplasmas were isolated in 71 percent from 100 non-gonococcal urethritis, 20 percent from 50 males control and none in 34 children control. Large colony mycoplasmas which were not the cause of non-gonococcal urethritis were isolated 45 percent from 100 non-gonococcal urethritis patients, and 42 percent of 50 males control but none in children control subjects. Although 112 bacteria were isolated from 100 non-gonococcal urethritis patients, but only 36 isolates were from 50 healthy males control and 44 isolates were from 34 school children. The majority of bacterial isolates were Staphylococcus sp., Streptococcus sp, and diphtheroid, other were gram negative bacilli. The susceptibility of isolated organisms to antibiotics were also performed.After the non-gonococcal urethritis patients were treated with antibiotics on the basis of clinician's experience, urethral specimens were collected from patients for the follow-up isolation of the organisms. Thirty nine out of 46 patients who gave a positive isolation of T-strain mycoplasma before the treatment but showed a negative results after the antibiotic treatment.

Cultural performed on specimen from patients with non-gonococcal urethritis who had been given treatment until all symptoms had disappeared revealed the presence of large colony mycoplasma and other bacteria but T-strain mycoplasma were consistently absent. These findings

together with the fact that T-strain mycoplasmas were isolated from non-gonococcal urethritis patients at a higher incidence than from normal controls indicate that T-strain mycoplasmas are one of the major causative agents of non-gonococcal urethritis. Moreover it may be inferred that some of the other bacteria isolated were probably part of the normal flora in these patients, as they still persisted after symptoms had disappeared. Susceptibility testing of commonly used antibiotics shows that erythromycin is probably the most appropriate drug for the treatment of non-gonococcal urethritis due to T-strain mycoplasma and other bacteria because low percentage of resistance were encountered with this drug.

To sum up, this work has demonstrated the importance of T-strain mycoplasmas as an etiologic agent for non-gonococcal urethritis. The results obtained here should also provide useful information concerning laboratory diagnosis of this disease and isolation of antibiotics for clinical treatment.

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