# SUMMARY AND CONCLUSION

Leprosy is a chronic inflammatory disease of man caused by intra-cellular Mycobacterium leprae, which displays a wide clinical spectrum related to host ability to develop and sustain specific cell-mediated immunity. Testicular affection in lepromatous leprosy is a frequent finding. Serum gonadotrophins may be elevated and serum testosterone level may be lowered in these patients.

The aim of this study was to review the previous literatures about leprosy and its effect on testes, and evaluate the effect of lepromatous leprosy on the reproductive function of the testicles.

This study was carried out on 25 adult male patients with lepromatous leprosy. Of the 25 patients studied, 15 were infertile, while 10 were fertile.

All the cases were taken from Damietta Leprosy Hospital, Cairo Leprosy Hospital at Kalaa and from Benha Department of Dermatology.

They were subjected to the following :

- Complete history taking and clinical examination.
- Semen analysis.
- Hormonal assay including FSH, LH and T.

- Incisional testicular biopsy in 8 leprotic infertile patients.

The results of this study can be summarized as follow:

(1) Serum Follicle Stimulating Hormone (FSH) level was raised and there was a significant difference between the leprotic infertile group and the leprotic fertile group.

(2) Serum luteinizing hormone (LH) level was raised and there was a significant difference between the leprotic infertile group and the leprotic fertile group.

(3) Sreum testosterone (T) showed no significant change between leprotic infertile and fertile patients.

(4) The histopathology of the leprotic infertile patients showed testicular affection ranged from spermatogenic arrest to complete fibrosis of the testicular architecture.

Finally, there are two possible explanations for fertility in patients with lepromatous leprosy, firstly most fertile patients with lepromatous leprosy received anti-leprotic therapy early. Secondly they have no history of recurrent reactions especially ENL.