

**UNIVERSITI TEKNOLOGI MARA**

**ENDOCRINOPATHIES IN HIV  
INFECTED PATIENTS**

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**MMed**

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## **AUTHOR'S DECLARATION**

I declare that the work in this dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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## ABSTRACT

**Background;** Endocrine abnormalities in the form of adrenal, thyroid and gonadal abnormalities have been reported amongst patients with HIV in both early and advanced stages of the disease. These abnormalities may be manifested as subtle biochemical changes or overt glandular failure, affecting muscle mass, sexual function, fat distribution and quality of life. This study aimed to determine the prevalence and associated factors of hormonal abnormalities in HIV-infected patients. **Objectives:** To determine the prevalence and associated factors of thyroid, adrenal and gonadal dysfunction among HIV-infected patients. **Methods:** Single centre cross sectional study which involved 150 HIV- positive cases recruited by convenient sampling. Each subject was required to answer specific symptoms questionnaire and their medical records were reviewed for relevant clinical and biochemical data. Blood for thyroid function test, cortisol, ACTH, FSH, LH, testosterone and estradiol were collected and estimated by the electrochemiluminescent immunoassay. Hormone abnormalities were identified as thyroid, adrenal and gonadal axes abnormalities and their correlation with possible associated factors were analyzed. **Results:** The highest prevalence of hormonal abnormality was hypogonadism which was detected in 23 patients (15.3%), followed by thyroid dysfunction in 18 patients (12%) and hypocortisolism in only 2 patients (1.3%). There was significant correlation between CD4 count, BMI and age with the hormone level. **Conclusion:** Prevalence of hormone abnormalities are low among HIV-infected patient in the present study. Although not common, there were significant correlation between CD4 count, age and BMI with hormone level.

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