

**THE ANTI-AGING EFFECTS OF  
TESTOSTERONE REPLACEMENT THERAPY,  
A RETROSPECTIVE DESCRIPTIVE STUDY**

**DR. NG SING BENG  
1001129230**

**MASTER OF SCIENCE (ANTI-AGING,  
REGENERATIVE MEDICINE AND MEDICAL  
AESTHETIC)  
FACULTY OF MEDICINE AND HEALTH SCIENCES  
UCSI UNIVERSITY**

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## ABSTRACT

This is a retrospective descriptive study consisted of 20 subjects with symptoms of testosterone deficiency syndrome (TDS) treated with TRT from 31<sup>st</sup> December 2011 to 31<sup>st</sup> December 2012. It was conducted in a primary care clinic located in Johor Bahru, Johor, Malaysia). Three aspects anti-aging effects of testosterone replacement therapy (TRT) were evaluated in this study, i.e. (1) change in quality of life based on Aging Males' Symptoms (AMS) scale, (2) changes in physical parameter and (3) changes in metabolic parameters. The assessments were done based on participants' response to Aging Males Symptoms (AMS) questionnaire and documentation of participants' physical parameters and metabolic parameters (from laboratory results). Of 20 subjects in this study, 95% (19 subjects) showed improvement in quality of life based on AMS questionnaire, 80% (16 subjects) recorded reduction in BMI, and 85% (17 subjects) attained improvement in WHR. In terms of metabolic parameters, 75% (15 subjects) documented improvement in triglyceride (TG), 70% (14 subjects) showed improvement in LDL-cholesterol and 75% recorded improvement in HDL-cholesterol. Out of these, five subjects reported side effects during treatment. Based on the result of this study, it could be concluded that TRT was able to improve quality of life, physical and metabolic parameters in patients who suffered from TDS. This showed that TRT could serve to be a good anti-aging treatment for this group of patients. Increase in PSA was possible during treatment with TRT. Thus, physicians are advised to watch out for this during TRT and to react appropriately and to refer to specialist for further advice when the condition necessitates.