THE EFFECT OF L-ARGININE ORALLY ON THE THE HISTOLOGICAL OF SEMINIFEROUS TUBULES OF RABBIT (Oryctolagus cuniculus) TESTICULAR
Fachruddin Aziz

ABSTRACT

L-Arginine is the precursor of nitric oxide (NO). Nitric oxide (NO) is one of reactive oxygen species (ROS) that influencing many physiological cell signalling mechanisms in many tissues. The aim of this research was to know the effect of l-arginine on the seminiferous tubules diameter as well as the epithelium thickness of seminiferous tubules of rabbit (Oryctolagus cuniculus). This research used sixteen rabbits (6 months old and ± 3 kg of body weight) were divided into two groups, P0 and P1. P0 is a control group and P1 was given l-arginine 6g/300ml/day for 30 consecutive days. After the 30 days treatment, their testicles were harvested and processed for histological examination. The data were analyzed by Independent-Samples T Test (T test). The result from statistical analysis showed that treatment with l-arginine has increased the diameter as well as the thickness of epithelium of seminiferous tubules of rabbit testicular significantly (p<0.05).

Key words: Seminiferous tubules, diameter and thick, l-arginine, nitric oxide.