ABSTRACT

The research was conducted to evaluate the effect of amphetamine as psychostimulan drug on ultrastructure spermatogenic cells of male rats (Rattus norvegicus L). Ultrastructure spermatogenic cells described from six male rats of Wistar stain. They were divided in to 2 groups (control and treatment groups). Four mg/kg/ days amphetamine were given sub-cutan injection. In control to injection with physiologic saline. The last of the treatment the rat were killed after 100 days the amphetamine injection. The testis were released into fixative solution. Ultrastructure morphologic analysis of the testis were evaluae of qualitatife to assess the effect of amphetamine on spermatogenic cells. Observation of spermatogenic cells (Spermatogonia, Spermatocyte, and Spermatyd cells) were done under the electrone microscope. The result of this experiment showed different morphologically from the amphetamine- treateed group and their respective control. In the treatment groups, Spermatogonia, Spermatocyte, and Spermatyd cells less endoplasmic reticulum than normal spermatogenic cells (control). More vacuolisation in membrane line of Spermatogonium cells, and in cytoplasm of Spermatocyte, and Spermatid cells than normal spermatogenic cells (control).

Key words: amphetamine, spermatogenic, vacuolisation