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Studies on Apoptosis of Tributyltin Oxide in Immature Male Mouse Sex Organs.

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The present was performed to identify the effects of tributyltin oxide (TBTO) in the immature mice testes. 3-week-old male ICR mice were orally administrated on one time basis of TBTO dose of 0 (Vehicle control, VC), 30 (TBTO 30 mg/kg, T30), 60 (TBTO 60 mg/kg, T60) per each one. Afrer 3 days the time treated of TBTO, mice were sacrified and weighted body, testis, epididymis, seminal vesicle, ductal deferens, and prostate. As the result of weighing, weights of each oragan and gonad index were tendency decresed in comparing groups of TBTO treated with that (VC) of unteated ($p < 0.05$). The result of observation with histological changes in testis showed a tendency for innercellular wall to increase damage and extinction in seminiferous tubles. As the result of investigation apoptotic cell numbers in the testis using teminal deoxy- nucleotidyl transferase-mediated dUTP- digoxygenin nick end-labeling (TUNEL) immunohistochemical strain, The ratio of Apoptic cells significantly was inceased in depending on treatment of TBTO does.

In conclusion, these results shows that TBTO triggers apoptosis on reproductive cell in testis and changes level of concentrations of steroid hormones in the immature male mice, as endocrine disruptors (EDs).

Keyword : Tributyltin oxide (TBTO), Sexual organ, apoptosis, Endocrine disruptors (EDs)