PERFORMANCE OF VITAMIN E (α-TOCOHEROL) AS ANTIOXIDANT AND EXPRESSION OF SPERMATOGENIC CELLS SITOCHROM C SPERMATOZOA MICE BY 2,3,7,8- TETRACHLORODIBENZO-P-DIOXIN EXPOSURE.

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ABSTRACT

Reproductive disorders in animals can cause temporary or permanent infertility. Infertility can be caused due to various factors, such as exposure to toxic substances into the body continuously. One example of a very dangerous toxic substances in the body is 2,3,7,8-tetrachlorodibenzop-dioxin (TCDD). TCDD is famous spermatogenic cells.

Vitamin E 11, 20, 37 E 37mg / kg / day for 15 days can minimalizir effect of TCDD 100ng/kg/day. HE staining and testing the expression of cytochrome C is done to know how is TCDD effect.

The study design using a completely randomized design. The calculation of the number of spermatogenic cells and expression of cytochrome C was calculated in each treatment by using analysis of variants (ANOVA) and significantly different when followed by Duncan test.

The results of this study prove that the treatment group P1, P2, and P3 are given vitamin E showed increased spermatogenic cell number compared to the positive control (P0) and decreased expression of cytochrome C spermatozoa.

The conclusion from this study is that TCDD greatly affects the process of spermatogenesis of male mice by inhibiting its development in phase spermatid and vitamin E can inhibit the performance of TCDD in the body of male mice by tying a series of TCDD carbon chain so that it becomes a substance that decreases its toxicity in animals.

Keyword : TCDD, α-tocopherol, Mus musculus, spermatogenic cells, sitochrom C