EFFECT OF VITAMIN E ON DECREASED OF THE LEYDIG CELL NECROSIS NUMBER IN MICE TREATED WITH 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (TCDD)

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ABSTRACT

The aims of this research was to investigate effect of vitamin E on decreased of the Leydig cell necrosis number in mice treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). Male mice of BALB/c strain were administered TCDD and Vitamin E in experimental groups. Four experimental groups of a combination of TCDD and vitamin E were designed as follows: 0 ng/kg/d and 0 mg/kg/d (control negative group, P0), 100 ng/kg/d and 0 mg/kg/d (control positive group, P1), 100 ng/kg/d and 11 mg/kg/d (Group P2), 100 ng/kg/d and 20 mg/kg/d (Group P3) respectively. Vitamin E and TCDD were given by oral gavage for 5 weeks. The result indicated that TCDD increased Leydig cell necrosis number and vitamin E at 11 and 20 mg/kg/d decreased Leydig cell necrosis number. The conclusion indicated that vitamin E at 11 and 20 mg/kg/d decreased the Leydig cell necrosis number in mice treated with 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD).

Keywords: vitamin E, Leydig cell, necrosis, mice, 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD)