

ABSTRACT

Pepticides are known to have an effect on hormonal balance. Endocrine Disrupting Chemicals (EDCs) in estrogen-like pesticides can have an impact on women's reproductive health, especially on the uterus. This study aims to determine the effect of pesticide exposure to mosquito coils on the proliferation of mice uterine endometrium (mus musculus).

This research is true experimental laboratory research with post test only control group design design. The study used 27 female mice, divided into 3 groups. The first group was control group, the second group was given exposure to mosquito coils for 8 hours / day and the third group was given exposure to mosquito coils for 12 hours / day.

The result of the research using one way anova test and post hoc analysis showed significant difference ($p = 0,000$) endometrial thickness between control group and exposure treatment group 8 hours/day and 12 hours/day. The result of analysis of relationship test using pearson test showed that there was correlation between endometrial thickness and duration of exposure.

The conclusion of this research is that there is difference of endometrial thickness between control group and exposure treatment group 8 hours/day and 12 hours/day. This may be due to the influence of EDCs on mosquito coils that result in increased endometrial proliferation. Also, there is a relationship between endometrial thickness and duration of exposure.

Keyword : Endocrine Disrupting Chemicals, Endometrium proliferation, Mosquito repellent