



ABSTRAK

PENGARUH DIET FOSFOR TINGGI PADA UTERUS TIKUS OVARIEKTOMI

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Ovariektomi menyebabkan hormon estrogen menurun. Turunnya hormon estrogen menurunkan pembentukan vitamin D. Diet fosfor tinggi juga menurunkan sintesis vitamin D aktif, sedangkan reseptor vitamin D terdapat pada ovarium, endometrium dan miometrium. Penelitian ini bertujuan untuk mengetahui pengaruh diet fosfor tinggi pada berat badan, persentase berat uterus, dan histopatologis uterus tikus ovariektomi. Dalam penelitian digunakan 10 ekor tikus Wistar betina umur delapan minggu, dibagi menjadi dua kelompok yaitu kelompok pakan standar tanpa ovariektomi (S+) dan pakan fosfor tinggi dengan perlakuan ovariektomi (T+). Sehari pasca ovariektomi, tikus kelompok T+ diberi pakan fosfor tinggi dan tikus S+ tetap diberi pakan standar masing-masing sebanyak 13 gram/hari/ekor selama tujuh minggu. Pada akhir penelitian, tikus dinekropsi dan uterus ditimbang, selanjutnya dianalisis dengan uji t dan dibuat preparat histopatologis dengan pengecatan hematoxilin-eosin. Hasil uji t berat badan tikus kelompok S+ lebih berat signifikan dibandingkan tikus kelompok T+ dan persentase berat uterus tikus kelompok T+ lebih rendah signifikan dibandingkan tikus kelompok S+. Histopatologis uterus tikus kelompok T+ terlihat epitel berbentuk skuamus simpleks, glandula uterina sedikit, dan serabut otot tinggal inti. Dari hasil penelitian disimpulkan bahwa diet fosfor tinggi pada tikus ovariektomi berpengaruh pada penurunan berat tikus, persentasi berat uterus, dan menyebabkan atrofi pada uterus.

Kata kunci : Fosfor tinggi, tikus ovariektomi, uterus



ABSTRACT

THE EFFECT OF A HIGH PHOSPHORUS DIET ON UTERINE OVARECTOMY RATS

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Ovariectomy causes the hormone estrogen to decrease. Decreasing the hormone estrogen decreases the formation of vitamin D. A high phosphorus diet also decreases the synthesis of active vitamin D, whereas vitamin D receptors are found in the ovaries, endometrium and myometrium. This study aims to determine the effect of a high phosphorus diet on body weight, percentage of uterine weight, and uterine histopathology of ovariectomy rats. In the study, 10 female Wistar rats aged eight weeks were used, divided into two groups, namely the standard feed group without ovariectomy (S +) and high phosphorus feed with ovariectomy (T +) treatment. A day after ovariectomy, T + group rats were given high phosphorus feed and S + rats remained given standard feed of 13 grams/day/head for seven weeks, respectively. At the end of the study, rats were extracted and the uterus was weighed, then analyzed with t test and histopathological preparations were made by hematoxylin-eosin staining. T test results in S+ group rats were significantly heavier than the T+ group rats and the percentage of uterine body weight of the T + group rats were significantly lower than the S + group rats. Uterine histopathology of T + group rats showed squamous simplex epithelium, small uterine glands, and residual muscle fibers. From the results of the study concluded that a high phosphorus diet in ovariectomy rats affects the reduction in rat weight, percentage of uterine weight, and causes atrophy of the uterus.

Keywords: High phosphorus, rat ovariectomy, uterus