

## INTISARI

### **PENGARUH PEMBERIAN ETINIL ESTRADIOL TERHADAP HISTOPATOLOGIS UTERUS TIKUS OVARIEKTOMI**

**Dini Agusti Paramanandi**

Penelitian ini dilakukan untuk mengetahui pengaruh pemberian etinil estradiol terhadap gambaran histologis dan ketebalan uterus tikus ovariektomi. Dua belas tikus *Sprague Dawley* betina umur 8 minggu dibagi menjadi 3 kelompok masing-masing 4 tikus. Tikus kelompok A dioperasi semu (non ovariektomi), tikus kelompok B dioperasi ovariektomi, dan tikus kelompok C dioperasi ovariektomi yang diberi etinil estradiol 0,2 mg/kg berat badan seminggu pasca ovariektomi. Setelah 2 bulan pasca operasi ovariektomi tikus dinekropsi untuk pengambilan uterus. Uterus difiksasi dalam formalin 10% untuk pemeriksaan histopatologi dengan pengecatan Hematoxylin Eosin (HE) dan dilakukan pengukuran ketebalan dinding uterus.

Hasil penelitian menunjukkan gambaran histopatologi uterus tikus ovariektomi menunjukkan adanya atropi pada epitelium mukosa uterus, glandula uterina dan jaringan ikat longgar yang tampak lebih padat pada lamina propria, sedangkan uterus tikus ovariektomi yang diberi etinil estradiol menunjukkan epitelium mukosa uterus yang berbentuk kolumnar simplek, adanya glandula uterina dan jaringan ikat longgar pada lamina propria. Hasil pengukuran ketebalan uterus menunjukkan bahwa terdapat perbedaan yang signifikan ( $p < 0,05$ ) pada ketebalan dinding uterus tikus non ovariektomi ( $1.178,55 \pm 181,78 \mu\text{m}$ ), ovariektomi ( $306,06 \pm 121,44 \mu\text{m}$ ) dan ovariektomi yang diberi etinil estradiol ( $948,97 \pm 111,52 \mu\text{m}$ ).

Pemberian etinil estradio 0,2 mg/kg berat badan selama 2 bulan dapat meningkatkan ketebalan dinding uterus, epitelium mukosa uterus berbentuk kolumnar simplek, glandula uterina dengan epitelium kuboid simplek dan jaringan ikat longgar pada lamina propria.

**Kata Kunci : etinil estradiol, ovariektomi, uterus,**

## ABSTRACT

### EFFECT OF ETHINYL ESTRADIOL ON UTERUS HISTOPATOLOGIC OF OVARIECTOMIZED RAT

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The objective of the research was to study the effect of ethinyl estradiol on uterus histopatologic and measured the uterus wall's thickness of ovariectomized rat. Twelve females *Sprague Dawlet* rats at 8 weeks of age were divided into 3 groups of 4 rats each. Group A was sham operated ( non ovariectomy), group B was ovariectomy and group C was ovariectomy and given etinil estradiol 0,2 mg/kg body weight a week after. Two months after ovariectomy the rats were necropsized to remove the uterus. Uterus were taken and fixed with formalin 10% for histopatological examination using Hemotoxyline Eosin staning and measured the thickness.

The result showed that the uterus histopalogic of ovariectomized group was atropi in the mucosa uterus epithelium, uterine glands and the connective tissue looked dense in lamina propria, while in the ovariectomized given etinil estradiol group showed simple columner epithelium in mucosa uterus, uterine glands with simple cuboid epithelium and loose connective tissue in the lamina propria. The uterus wall's thickness measurement showed that there was significantly different ( $p < 0,05$ ) between non ovariectomized group ( $1.178,55 \pm 181,78 \mu\text{m}$ ), ovariectomized group ( $306,06 \pm 121,44 \mu\text{m}$ ) and ovariectomized added with ethinyl estradiol group ( $948,97 \pm 111,52 \mu\text{m}$ ).

Ethinyl estardiol 0,2 mg/kg body weight that given to ovariectomy group for 2 months increase the uterus wall's thickness, mucosa uterus epithelium was columner simple shaped, uterine glands was cuboid simple epithelium and in lamina propria showed loose connective tissue.

**Key words : etinil estradiol, ovariectomy, uterus**