Efek estrogenik ekstrak etanol 70% kunyit (Curcuma domestica VAL.) terhadap mencit (Mus musculus L.) betina yang diovariektomi

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Abstrak

Telah dilakukan penelitian untuk mengetahui pengaruh ekstrak rimpang kunyit (Curcuma domestica Val.) terhadap ketebalan endometrium, epitel vagina, kelenjar mammae, dan protein reseptor estrogen (RE) pada mencit-mencit yang telah diovariektomi. Dua puluh lima mencit yang telah diovariektomi yang dibagi menjadi lima kelompok, yaitu kelompok diberi perlakuan dengan etinilestradiol (8,4 x 10-3 g), akuades (10 ml), dan ekstrak rimpang kunyit dosis 230 mg/kg bb; 310 mg/kg bb; dan 390 mg/kg bb selama delapan hari. Mencit dibunuh pada akhir percobaan, kemudian uterus, vagina, dan mamae diambil, lalu berat basah uterus dicatat. Uterus, vagina, dan mammae diperiksa preparat histologisnya. Keberadaan protein reseptor estrogen (RE) pada uterus dianalisis menggunakan SDS-PAGE. Hasil uji anava 1-faktor menunjukkan bahwa ekstrak rimpang kunyit dosis 310 mg/kg bb dan 390 mg/kg bb memberikan efek estrogenik pada epitel vagina, ketebalan endometrium, dan diameter kelenjar mammae. Analisis SDS-PAGE menunjukkan adanya perbedaan konsentrasi protein antara kontrol dan kelompok perlakuan yang terlihat dari ketebalan pita-pita protein. Pita reseptor estrogen dapat dideteksi pada sampel kelompok perlakuan dengan berat molekul 45 kDa.

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Estrogenic Effect of 70% Ethanol Turmeric (Curcuma domestica Val.) extract on ovariectomized Female Mice (Mus musculus L.). The influence of extract turmeric (Curcuma domestica Val.) on endometrium thickness, vaginal epithelium, mammary gland, and protein of estrogen receptor of ovariectomized mice was examined. Twenty five ovariectomized mice which were divided into five groups, were treated by ethynilestradiol (8,4 x 10-3 g), aquades (10 ml), and turmeric extract at doses 230 mg/kg b.w.; 310 mg/kg b.w.; and 390 mg/kg b.w. for eight days. At the end of experiments the mice were killed, then the uterus, vagina, and mammae were removed and the wet weight of uterus was recorded. Uterus, vagina, and mammae were examined histologically. Estrogen receptor protein from uterus were analized by using SDS-PAGE. One way anava test showed that turmeric extract at doses 310 mg/kg b.w. and 390 mg/kg b.w give estrogenic effect on vaginal ephitelium, endometrium thickness, and diametre of mammary glands. SDS-PAGE analysis showed there were differences in protein concentration between control and treatment groups which were seen in the thickness of the bands. Estrogen receptor band could be detected in sampel of treatment groups at molecular weight 45 kDa.