

Diosgenin--a growth stimulator of mammary gland of ovariectomized mouse.

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Abstract

Estrogenic action of diosgenin on the mammary epithelium of ovariectomized (OVX) mouse has been reported. Diosgenin when administered (sc) at the dose levels of 20 and 40 mg/kg body weight for a period of 15 days stimulated the growth of mammary epithelium. This was indicated by the increase in DNA content, increase in number of ducts and appearance of terminal endbuds. There was a significant increase in the mammary development scores in the presence of diosgenin. Concomitant treatment of estrogen and diosgenin showed augmentation of estrogenic effect of diosgenin especially at the higher dose level (40 mg/kg body wt). Diosgenin showed a lack of progestogenic action as was apparent from the absence of alveolar development even in the presence of exogenous estrogen.