

Pregnancy, progesterone and progestins in relation to breast cancer risk

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Abstract

In the last two decades the prevailing opinion, supported by the “estrogen augmented by progesterone” hypothesis, has been that progesterone contributes to the development of breast cancer (BC). Support for this opinion was provided by the finding that some synthetic progestins, when added to estrogen in hormone replacement therapy (HRT) for menopausal complaints, increase the BC risk more than estrogen alone. However, recent findings suggest that both the production of progesterone during pregnancy and the progesterone endogenously produced or exogenously administered outside pregnancy, does not increase BC risk, and could even be protective. The increased BC risk found with the addition of synthetic progestins to estrogen in HRT seems in all likelihood due to the fact that these progestins (medroxyprogesterone acetate and 19-nortestosterone-derivatives) are endowed with some non-progesterone-like effects which can potentiate the proliferative action of estrogens. The use of progestational agents in pregnancy, for example to prevent preterm birth, does not cause concern in relation to BC risk.