Concomitant administration of an isopropanolic extract of black cohosh and tamoxifen in the in vivo tumor model of implanted RUCA-I rat endometrial adenocarcinoma cells.

Nisslein T¹, Freudenstein J.

Abstract

Black cohosh is a well known herbal remedy of long traditional use against menopausal complaints. Recently published studies on postmenopausal hormone replacement with synthetic substances associated severe negative side effects with an increase in duration of administration. The subsequent popularity of alternative treatments, often herbal drugs, made investigations into the safety of these preparations more pressing. Until now, black cohosh demonstrated no estrogen-agonistic activity in mammary cells, neither in animal model nor in cell culture, i.e., no gene transcription or cell proliferation was induced. Here we tested for the influence of a standardized isopropanolic extract of black cohosh on an animal model of endometrial cancer. Ectopic growth of the primary tumor as well as the incidence and localization of metastases were examined, partly in the setting of a combination treatment with tamoxifen. In contrast to the endometrial estrogen agonist tamoxifen, black cohosh did not further growth or metastasizing potential of the primary tumor. Absence of detectable supportive or antagonistic effects between both treatments most probable come from the relatively high tamoxifen dose.

PMID: 15110078 [PubMed - indexed for MEDLINE]