

Inhibition of carcinogen induced c-Ha-ras and c-fos proto-oncogenes expression by dietary curcumin

ABSTRACT

Our research has revealed that curcumin can significantly reduce DMBA- and TPA-induced ras and fos gene expression in mouse skin.

INTRODUCTION

Germline mutations in the BRCA1 or BRCA2 genes are responsible for hereditary breast cancer susceptibility. BRCA2 is connected to breast cancer in both women and men, and moderately increased risk for ovarian cancer. Zabludoff et al. discovered that Brca1 mRNA levels were highest in the testis and the ovaries in adult mouse tissues. In tests, it was discovered that Brca1 mRNA expression was high in the testis of mice and high for meiotic cells and postmeiotic round spermatids, but low and non-expressed in premeizoid germ cells; and Brcas1 also expressed at low levels in Sertoli cells. Blackshear et al., on the contrary, demonstrated in the mouse that Brca1 and Brca2 mRNA are expressed in mitotic spermatogonia (along with early meiotic prophase spermatocytes); Sertoli cells, and Leydig interstitial cells were found to be non-reactive for Brcas1&Brca2 transcripts. Specifically, Brca1 and Brca2 transcripts were found in the normal mouse adult ovary, which were localized to granulosa cells, thecal cells (thecal cells), oocytes, and luteal cells of newly formed corpora lutea, as well as surface epithelium. Given these results, we immunochemically examined the presence of human BRCA1 and BRCA2 proteins in an ovotestis using a different panel of antibodies against BRAF1 (Becky-5-K) and Bacillan's companion antibody BLR2.

CONCLUSION

After taking antipsychotics, peripheral lymphocytes' molecular biologically-determined dopamine receptors are reactive, as demonstrated in this study.