



Antitumor Effects of Paeonol on Mice Bearing EMT6 Breast Infiltrating Ductal Carcinoma

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SUMMARY. Paeonol is a micromolecular phenolic compound and it is the main component of Chinese herbal medicine that has been isolated from the root bark of *Paeonia moutan*. Paeonol is identified to have various physiological activities. In this study the antitumor activity and the possible mechanisms of paeonol were investigated in mice bearing EMT6 breast cancer model. The results showed that paeonol (150 mg/kg and 300 mg/kg) effectively reduced the weight of EMT6 breast tumor. Compared with the control group, paeonol significantly increased the number of tumor cells in G0/G1 phase, increased the number of cells in apoptosis and decreased the number of cells in S phase and G2/M, inhibited the expression of mutant p53, Bcl-2 and C-erbB-2 protein. The mechanisms of paeonol of antitumor effects might be associated with inhibition of tumor cells in G0/G1 phase, inducing cell apoptosis and inhibiting the expression of mutant p53, Bcl-2 and C-erbB-2 protein.

KEY WORDS: Breast cancer, Bcl-2, C-erbB-2, P53, Paeonol.

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