



6-Hydroxysugiol Isolated from *Salvia yunnanensis* Inhibits Proliferation and Migration of HepG2 Cells as well as Exhibits Potent Anti-Angiogenic Activity

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SUMMARY. The aim of our study was to investigate the anti-angiogenic effect and anti-tumor activity of 6-hydroxysugiol isolated from *Salvia yunnanensis*. The cell proliferation was evaluated by MTT assay. The apoptosis of HepG2 was studied through the fluorescence microscope. Anti-angiogenic activity of 6-hydroxysugiol was tested by chicken chorioallantoic membrane (CAM) model *in vivo*. In order to study the mechanism of 6-hydroxysugiol inhibiting angiogenesis, the expression of VEGF in the HepG2 cell and the cell culture fluid were determined by immunocytochemistry and ELISA assay. The results showed that the cell proliferation was inhibited to 76.2 % by 6-hydroxysugiol, at the concentration 0.32 mmol/L. The ability of cells to migrate was significantly reduced by 6-hydroxysugiol and the 59.72 % cells showed the typically apoptotic chromatin fragmentation that were treated with 6-hydroxysugiol at 0.64 mmol/L. The expression of VEGF in the HepG2 cell and in the cell culture medium were all decreased to by 6-hydroxysugiol. 6-hydroxysugiol is able to suppress angiogenesis on CAM models. These results suggest that it is deserved further investigation as a promising anti-tumor angiogenesis compound.

KEY WORDS: Angiogenesis, Anti-tumor, 6-hydroxysugiol, VEGF.

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