

STUDY ON CHINESE HERBAL COMPOUND JIEDU XIAOZHENG YIN INDUCING APOPTOSIS OF GASTRIC CARCINOMA CELLS VIA LSCM

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ABSTRACT: Objective To evaluate the pharmacological effects of Jiedu Xiaozheng Yin, a Chinese herbal compound [1], on apoptosis and apoptosis related genes of gastric carcinoma cells BGC-823. **Methods** Two in vitro experimental systems of gastric carcinoma cells BGC-823 were performed in parallel. The first system involved the addition of serum obtained from rat treated orally with Jiedu Xiaozheng Yin, while the second system involved the addition of normal rat serum. The cells were treated for 24 hours, 48 hours or 72 hours, then they were Immunofluorescent stained by FITC to detect the karyomorphism and the expression of apoptosis related genes as Bax, Bcl-2, Fas and Fas-L in the cells[2], nucleus stained by DAPI. The results were observed and semiquantitatively analysed by laser scanning confocal microscopy. **Results** The serum of rat pretreated with Jiedu Xiaozheng Yin induced apoptosis of gastric carcinoma cells showing karyorrhexis, karyopyknosis and chromatin

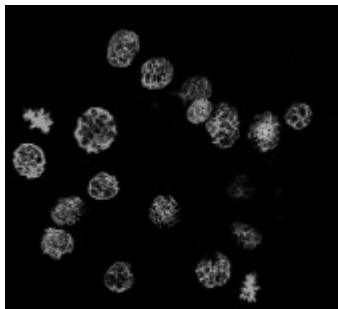


Fig.1: nucleus of Jiedu Xiaozheng Yin treated cells. stained by DAPI

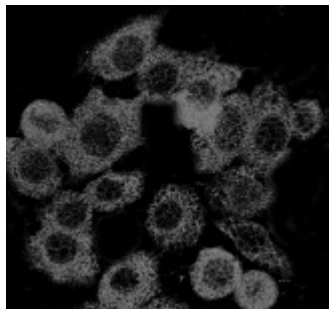


Fig.2: Bax expression in cytoplasm with Jiedu Xiaozheng Yin treatment. stained by FITC.

margination(Fig.1). It significantly increased the expression of Bax(Fig.2) and Fas ($P<0.05$), while decreased the expression of Fas-L($P<0.05$), and both in a dose dependent manner. It made no difference on the expression of Bcl-2. **Conclusion** Jiedu Xiaozheng Yin may regulate the levels of Bax, Fas and Fas-L in gastric carcinoma cells, and thus induce the cell apoptosis.

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