newly synthesized naphthyridine derivatives against several clinical isolates of H.pylori. MICs were determined by a routine agar dilution technique with blood agar base #2, supplemented with 10% fetal bovine serum. The results showed that the strains were susceptible to our compounds as well as omeprazole. Some of the compounds were about 3 to 5 times more potent than omeprazole. These reuslts suggest that our new compounds have potent inhibitory activities against H. pyloriand might be useful for the clinical eradication of H. pylori.

[PA1-6] [10/18/2001 (Thr) 14:00 - 17:00 / Hall D]

Tetrandrine Stimulates the Apoptosis of Rat Hepatic Stellate Cells

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One of the therapeutic goal for hepatic fibrosis is to eliminate the activated hepatic stellate cells by apoptosis, as hepatic stellate cells play a central role in hepatic fibrosis. In this study, we investigated apoptosis stimulation by tetrandrine in activated rat hepatic stellate cells.
Transformed rat hepatic stellate cells (T-HSC/Cl-6) and rat hepatocytes were treated with tetrandrine. Treatment with tetrandrine in T-HSC/Cl-6 cells resulted in morphologic alterations, induction of low molecular weight DNA fragmentation, activation of caspase-3 and caspase-8, subsequent proteolytic *cleavage of poly(ADP-ribose) polymerase in a concentration-dependent manner, at concentrations that* had no effect on the viability of rat hepatocytes. But tetrandrine had no effect either on mitochondrial membrane depolarization or the release of cytochrome c from mitochondria into the cytosol.
In conclusion, results above demonstrate that tetrandrine stimulates apoptosis via caspase-3 and caspase-8 activation in T-HSC/Cl-6 cells at concentrations that have no toxicity on hepatocytes. And this might be one of the antifibrotic mechanims of of tetrandrine in vivo.

[PA1-7] [10/18/2001 (Thr) 14:00 - 17:00 / Hall D]

Dimethylsulfoxide Inhibits the Degranulation of Mast Cells by Interfering the Signaling Pathway of FcεRI, M2 type Pyruvate Kinase

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We examined the effects of DMSO, a universal solvent for various chemicals, for the signaling pathways of high affinity IgE receptor (FcεRI). DMSO significantly inhibited FcεRI-mediated degranulation of RBL-2H3 cells. In order to find out specific signaling components affected by DMSO, cells were treated with DMSO and the FcεRI-mediated tyrosine phosphorylations of Syk, PLC-γ1, PLC-γ2, ERK, and pyruvate *kinase were examined. DMSO at 0.5% specifically inhibited FcεRI-mediated tyrosine phosphorylation of* M2 type pyruvate kinase, which we recently reported as a new signal component of FcεRI. These results show that DMSO could interfere with the signaling of FcεRI when used above certain concentration by *interfering with the modulation of M2 type pyruvate kinse through FcεRI.*

[PA1-8] [10/18/2001 (Thr) 14:00 - 17:00 / Hall D]

Vasorelaxant effect of BMS-180448, a novel ATP sensitive K+ channel opener, in rat aorta

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