that KHU-2 showed the excellent hypoglycemic activity and its effect was in no way inferior to KHU-1.

[PA1-56] [10/18/2001 (Thr) 14:00 - 17:00 / Hall D]

Hair-Growth Effect and Single dose Oral Toxicity Test of Illite Powder

Park Hyung Sup Lee Choong Jae Kim Bak-Kwang Yim Dong Sool, Cheong Jae Hoon

Department of Pharmacy, Sahmyook University, Seoul 139-742, Korea *College of Pharmacy, Seoul National University, Seoul 152-742, Korea

The hair-growth effect of Illite was suggested by some people who were using Illite as a beautifying material. We investigated the hair-growth effect of Illite powder. The hair-growth effects were investigated by two methods, the activity of hair-growth after shaving the hairs on the black mouse (C57BL/6) and the recovery activity of hair-growth after hair-loss induced by cyclophosphamide treatment. Suspension of Illite powder was administered to the back of the black mouse by method of skin paste. Illite promote significantly the hair growth of mouse in both conditions of shaving and hair-loss. And then we investigated the toxicity which may be induced by Illite when it was administrated orally as a single dose, we could not find out any significant toxicity induced by single dose oral administration of it.

[PA1-57] [10/18/2001 (Thr) 14:00 - 17:00 / Hall D]

Increasement of Susceptibility against Stress in Helicobacter pylori Infection and Protective Effect of Mucogen

Oh TaeYoung⁰, Koh SangBum, Lee KiMyung**, Ahn ByoungOk, Kim YoungBae**, Lee EunBang*, Kim WonBae, Hahm KiBaik**

Research Laboratories, Dong-A Pharm. Co. Ltd., Korea, *Natural Product Institute, Seoul National University, Korea, **Department of Gastroenterology and Pathology, Ajou University School of Medicine, Korea

It is known that stress is imporant determining factor in *Helicobactr pylori*–infectious stomach–related disease. We surveyed degree of gastropathy and change of cytokine, chemokine, oxidative damage and inflammation–related transcription factor in *Helicobacter pylori*–infection experimentally animal models.

We used Sprague-Dawley rat and Mongolian gerbil, and infected $Helicobacter\ pylori\ (1\times10^9\ cfu/0.1\ ml)$ with oral administration. After 24 weeks, we loaded stress to place inside cold water with each animal inserted stress cage. 30, 120 or 480 minutes later, animals were sacrificed and measured gross observation and histopathology. Compared $Helicobacter\ pylori$ infection group to non-infection group, infection group significantly increased gastropathy in gross and microscopic observation score after stress-loaded 30, 120 or 480 minutes later, augmented IL-1 β and TNF- α at 30 minutes, and IFN- γ at 120 minutes, significantly. To compared both infection and non-infection group, Mucogen treated group significantly reduced all cytokine and chemokine levels at each times and significantly increased HSP 60 and HSP 70 at each 120 minutes and 60 minutes. These results suggest that stress is one of the important factor in $Helicobacter\ pylori$ infection-related gastropathy and Mucogen has significant therapeutic potential in the treatment of $Helicobacter\ pylori$ infection added stress induced gastropathy.

[PA1-58] [10/18/2001 (Thr) 14:00 - 17:00 / Hall D]

The effect of Liriopis Tuber extracts on exercise performance and Blood fatigue elements in rats.

rhee in ja^o, choi woneil, kim unjung, yang junho