codeine.
At this time, opium is assigned as narcotics in korea according to the rule concerning narcotics control, and its major component morphine and codeine too.
The concentration of opiate alkaloids, morphine and codeine was measured to classify it from extra-narcotics used in medical treatment.
In this research, we confirmed and measured the content of morphine and codeine in 'bokbanggamchopyeon'
30 species of seized 'bokbanggamchopyeon' tablets were used for test and qualitative and quantitative analysis of morphine and codeine were performed by GC/MS.
As a result, all of 30 samples showed about 10 times higher concentration of morphine and codeine than extra-narcotics according to the rule concerning narcotics control.

[PD4-18] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

Determination of Glimepiride in Human Plasma by LC-MS/MS

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This study established a sensitive novel quantification method for detecting glimepiride in human plasma using LC-MS/MS for pharmacokinetic studies. The mobile phase used after degassing was composed of 10 mM ammonium acetate and acetonitrile (20:80, pH 3.0), with flow rate of 200uL/min. One mL plasma were pipetted into glass tubes and spiked with 0.1mL of internal standard solution. After adding 6 mL of diethyl ether - ethyl acetate (1:1, v/v), the plasma sample was then shacked for 15 min. A centrifuged upper layer was then evaporated and reconstituted with 120 uL mobile phase and 20 uL of sample were injected into LC-MS/MS. Glimepiride produced a protonated precursor ion ([M+H]+) at m/z 491 with a major product ion at m/z 352. On the other hand, internal standard produced a protonated precursor ion ([M+H]+) at m/z 446 with a major product ion at 321. Based on a signal-to-noise level (S/N) of 9-11, the limit of quantification for glimepiride was found to be 0.1ng/mL. Validation experiments have shown that the assay has good precision and accuracy over a wide concentration range. This simple, rapid and robust assay will enable the complete processing of large sample for pharmacokinetic studies of glimepiride in human plasma.

[PD4-19] [04/18/2003 (Fri) 13:30 - 16:30 / Hall P]

Chiral Separation of Non-Steroidal Inflammatory Drugs as Dual Diastereomeric Derivatives with (R)-and (S)-Phenylethylamines

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The carboxylated acidic non-steroidal antiinflammatory drugs (NSAIDs) constitute the principal class of agents for controlling the pain and inflammation of the rheumatic diseases. It is mostly administered as a racemic mixture like most other drugs with asymmetric carbon atoms. However enantiomers of many racemic drug substances have been shown to posses different pharmacological toxicological properties. Therefore, production of active NSAIDs in enantiomerically pure forms and their optical purity control have become important tasks. In this study, each enantiomer of nine NSAIDs (ibuprofen, suprofen, flurbiprofen, fenoprofen, pirprofen, indoprofen, carprofen, ketoprofen and naproxen) was activated with ethyl chloroformate, followed by conversion into diastereomeric amide either with (R)-(+)-phenylethylamine or (S)-(-)-phenylethylamine. The resulting derivative extracted with ethyl acetate in acidic condition was