[PE1-32] [04/21/2000 (Fri) 10:30 - 11:30 / [1st Fl, Bldg 3]]

Drug releasing porous poly (L-lactide)-tricalcium phosphate-alginate membrane for bone regeneration therapy

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With an aim of obtaining effective bone regeneration, many studies using a guided tissue regeneration (GTR) technique have been attempted. Membrane-based barrier system is suitable for preventing connective tissue ingrowth and permeating nutritive elements to heal the bony defect and providing sufficient space for bone growth. In this study, porous poly (L-lactide)-Tricalcium phosphate(TCP)-alginate membrane was produced by solvent casting method using solvent mixture of methylene chloride and ethyl acetate. TCP was added to increase mechanical supportability and regulate porosity of the membrane. Sodium alginate was added to enhance hydrophilicity and moldability of the membrane. Scanning electron microscopic observation(SEM, JEOL, Ltd, Tokyo, Japan), drug release profile, biodegradation characterization, cellular attachment test and cytotoxicity test were investigated. Tetracycline improved bone regenerating efficacy after release from the membrane. This porous membrane system has proper drug releasing function and mechanical strength during therapeutic period, which can be suggested as an effective tool for guided bone regeneration.

[PE2-1] [04/21/2000 (Fri) 10:30 - 11:30 / [1st Fl, Bldg 3]]

A reliable and sensitive high performance liquid chromatographic assay of cisapride in human plasma and its pharmacokinetics

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In this study, a reliable and sensitive method for the quantitative determination of cisapride (CIS) in human plasma by reversed-phase liquid chromatography with fluorescence detection was developed and validated. CIS and internal standard, azelastin, in human plasma were extracted with the mixture of cyclohexane-isoamyl alcohol (98:2 v/v). The method was fully validated from 2 to 500 ng/ml linearity range with a recovery of 93.3 %. The lower limit of quantitation of the method was 0.1 ng/ml. The intra- and inter-day reproducibility was less than 10 %. This method was successfully applied to determine the pharmacokinetic parameters of Propulsid in 16 human subjects receiving a single peroral dose (10 mg). The mean maximum concentration (C_{max}) was 51.9 ng/ml, and the mean area under the concentration-time curve (AUC_{0-48}) was 494.4 ng.hr ml^{-1}. The time to reach the peak level (T_{max}) was 1.6 hr.

[PE2-2] [04/21/2000 (Fri) 10:30 - 11:30 / [1st Fl, Bldg 3]]

Rapid microbore liquid chromatographic analysis of Tofisofam in human plasma with column-switching

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