Pharmacokinetics and Pharmacodynamics

1. Staffs and Students (April, 2010)

Professor Masato YASUHARA

Graduate Student Tohru ARINO, Takako KOSAKA,

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2. Purpose of Education

Department of Hospital Pharmacy, University Hospital of Medicine, is in charge of the education of pharmacokinetics and pharmacodynamics for the establishment of safe and effective drug therapy. In the graduate course, the lecture on the recent progress of the pharmacokinetic analysis and drug transport will be given. Students will have the practice of pharmacokinetic analysis and animal experiments.

3. Research Subjects

- 1) Investigation on the membrane transport of drugs
- 2) Kinetics of drug action in disease states
- 3) Therapeutic drug monitoring and clinical pharmacokinetics
- 4) Development of new drug delivery systems

4. Clinical Services

Department of Hospital Pharmacy provides all services about the pharmacotherapy, including dispensing, formulation, preparation of injections and infusion solutions, drug information, and therapeutic drug monitoring.

5. Publications

Original Article

- 1. Ishiwata Y, and Yasuhara M: Gatifloxacin-induced histamine release and hyperglycemia in rats. Eur. J. Pharmacol., 645, 192-197 (2010).
- 2. Nagasawa M, Mitsuiki N, Ono T, Takagi M, Oda M.H, Yasuhara M, and Mizutani S: Pharmacokinetic monitoring is still required for intravenous busulfan in SCT for small children. Int. J. Hematol., 91, 728-730 (2010).
- 3. Nakauchi Y, Takase H, Sugita S, Mochizuki M, Shibata S, Ishiwata Y, Shibuya Y, Yasuhara M, Miura O,and Arai A: Concurrent administration of intravenous systemic and intravitreal methotrexate for intraocular lymphoma with central nervous system involvement. Int. J. Hematol., 92, 179-185 (2010).
- 4. Hoshino A, Iimura T, Ueha S, Hanada S, Maruoka Y, Mayahara M, Suzuki K, Imai T, Ito M, Manome Y, Yasuhara M, Kirino T, Yamaguchi A, Matsuhima K, and Yamamoto K: Deficiency of chemokine receptor CCR1 causes osteopenia due to impaired functions of osteoclasts and osteoblasts. J. Biol. Chem., 285, 28826-28837 (2010).