

Division of Clinical Pharmacy
Department of Pharmaceutics

Outline

Using published on the PMDA website as the "Japanese Adverse Drug Event Report database (JADER)", we investigate the backgrounds of patients who have experienced specific serious adverse drug reactions and analyze their characteristics.

With the functional decline of swallowing, it was frequently difficult to swallow the tablets and capsules in elder patients. In our laboratory, a variety of materials have been investigated to prepare gel formulations with suitable characteristics for use by geriatric patients.

Faculty members

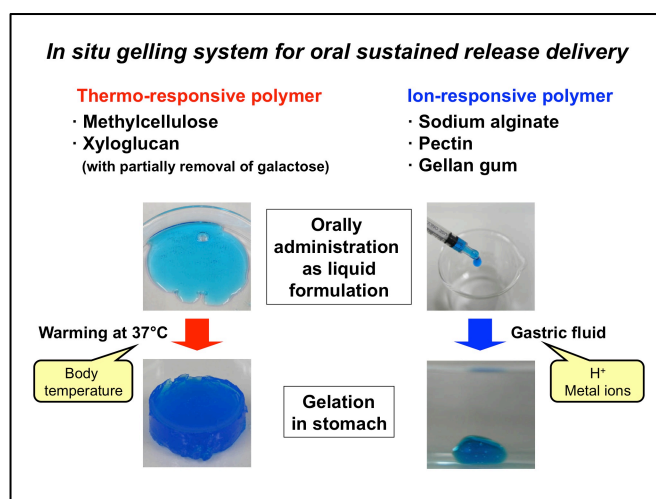
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Assistant Professor ; Tetsuya SHIMOYAMA, Ph.D.

Main research in progress

- 1) Clarification of risk factors of serious side effects using an adverse drug event report database
- 2) Design of suitable formulation for geriatrics and dysphagic patients by use of natural polysaccharide gels.
- 3) Analysis of rheological properties of natural polysaccharides.



Current publications

- * Sakata Y., Nakajima H., Kitajima T., Ito Y., Suzuki K., Yamamoto Y., Kobayashi M., Usefulness of Telephone Consultation Outpatient Support System (NexaLink) for Outpatients with Hepatocellular Carcinoma Taking Sorafenib, *J. Jpn. Soc. Pharmaceu. Oncol.*, 26, 2-8 (2022).
- * Umehara K., Yama K., Koike N., Takayama S., Wakamoto A., Hatuyama T., Kobayashi M., Sato H., Long-term exposure to pemetrexed induces chronic renal dysfunction in patients with advanced and recurrent non-squamous cell lung cancer: a retrospective study, *Ren. Replace. Ther.*, 6:43(1), 1-11 (2020).
- * Takahashi M., Takayama S., Suga H., Kadomura S., Kojima M., Iwao K., Takeda K., Sato H., Kobayashi M., Saitoh H., Factors resulting correlation and Differences in renal function evaluation index using the serum cystatin C and creatinine as measured by an enzymatic method, *Yakugaku Zasshi*, 140(1), 81-90 (2020).
- * Kitamura S., Nakai M., Otani H., Ohata Y., Kanou H., Itoi H., Kijiyama S., Kimura R., Kimura T., Tadano K., Shimoyama T., Itoh K., Kobayashi M. Factors associated with impaired swallowing function of elderly insurance-covered pharmacy users, *J. Geriatr. Pharm.*, 1(1), 8-13, (2018).

- * Umehara K., Sato H., Watanabe A., Takeda K., Takayama S., Fujita A., Sekine K., Shimoyama T., Itoh K., Kobayashi M., Relationship between hematotoxicity and renal function in the patient treated with carboplatin and irinotecan, *Jpn. J. Nephrol. Pharmacother.*, 6(3), 163-170 (2017).
- * Sakurada W., Shimoyama T., Itoh K., Kobayashi M., Changes in elution of urapidil sustained release capsules prepared by simple suspension method, *Jpn. J. Pharm. Health Care Sci.*, 42(5), 350-355 (2016).
- * Sakurada W., Shimoyama T., Itoh K., Kobayashi M., Solubility estimation for drugs treated with the simple suspension method using available dissolution test profiles., *Jpn. J. Pharm. Health Care Sci.*, 41(8), 540-549 (2015).
- * Shimoyama T., Uraki M., Takahashi A., Kobayashi M., Takahata M., Makino Y., Itoh K., Kobayashi M., Effect of drug on physical characteristics of oral methylcellulose/alginate formulation, *J. Pharm. Sci. Tech. Jpn.*, 74(1), 73-83 (2014).
- * Kobayashi M., Takakura M., Noda K., Sakurada W., Tadano K., Comparison of solubility for poorly water-soluble proprietary and generic drugs in the simple suspension method, *J. Pharm. Sci. Tech. Jpn.*, 74(1), 93-98 (2014).
- * Miyazaki S., Murofushi H., Shimoyama T., Itoh K., Kobayashi M., Attwood D., The influence of the degree of esterification on the release characteristics of in situ gelling pectin formulations for oral sustained delivery of paracetamol, *Pharm. Dev. Technol.*, 18(5), 1259-1264 (2013).
- * Shimoyama T., Miyagi Y., Itoh K., Kobayashi M., Effect of storage temperature on gelation of oral methylcellulose formulation, *Yakugaku Zasshi*, 133(6), 719-725 (2013).
- * Shimoyama T., Itoh K., Kobayashi M., Miyazaki S., D'Emanuele A., Attwood D., Oral liquid in situ gelling methylcellulose/alginate formulations for sustained drug delivery to dysphagic patients, *Drug Dev. Ind. Pharm.*, 38(8), 952-960 (2012).
- * Noda K., Gotoh Y., Tanioka S., Narayama Y., Kobayashi M., Iwai S., Katoh N., Tadano K., The relationship between the plasma concentration of bepridil and its efficacy in the treatment of atrial fibrillation in Japanese patients., *Biol. Pharm. Bull.*, 35(5), 672-676 (2012).
- * Noda K., Narayama Y., Gotoh Y., Kobayashi M., Iwai S., Katoh N., Tadano K., The clinical efficacy of bepridil depends on its concentration in human plasma., *Jpn. J. Ther. Drug Monit.*, 29(4), 109-114 (2012).
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- * Miyazaki S., Ishitani M., Takahashi A., Shimoyama T., Itoh K., Attwood D., Carrageenan gels for oral sustained delivery of acetaminophen to dysphagic patients, *Biol. Pharm. Bull.*, 34(1), 164-6 (2011).
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- * Itoh K., Tsuruya R., Shimoyama T., Watanabe H., Miyazaki S., D'Emanuele A., Attwood D., *In situ* gelling xyloglucan/alginate liquid formulation for oral sustained drug delivery to dysphagic patients, *Drug Dev. Ind. Pharm.*, 36(4), 449-55 (2010).
- * Miyazaki S., Takahashi A., Itoh K., Ishitani M., Dairaku M., Togashi M., Mikami R., Attwood D., Preparation and evaluation of gel formulations for oral sustained delivery to dysphagic patients, *Drug Dev. Ind. Pharm.*, 35(7), 780-7 (2009).
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