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## EDITORIAL

### In this issue: PK of posaconazole, aspirin resistance, psychotropic medications in Spain, and ribostamycin in pregnancy

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In this second number of the first volume of the journal, we are proud to present again two review papers and two original studies.

Posaconazole is a recent systemic antifungal agent that belongs to the azoles chemical family. In the European Union, posaconazole is licensed for the treatment of adult patients with various refractory invasive infections and those with oropharyngeal candidiasis. It is also approved as prophylactic treatment of invasive fungal infections in high-risk patients such as those receiving chemotherapy for acute myelogenous leukemia or those treated for a severe graft-versus-host disease after allogeneic hematopoietic stem-cell transplantation.

The review by LEVEQUE et al. [1] summarizes the published pharmacokinetic (PK) data of posaconazole in humans. The authors did a thorough review of the literature on the PK of posaconazole in different groups of subjects including children, and patients with renal and hepatic dysfunction. The manuscript also reviewed the factors that may potentially alter the PK of posaconazole such as food, dosing schedule, age, body weight, body surface area, and pharmacogenetics. Potential drug-drug interactions were also summarized.

In the second review paper, COX [2] reviewed and analyzed the interesting and polemic topic of aspi-

rin resistance. There are three types of aspirin non-response: treatment failure, and pharmacokinetic and pharmacodynamic resistance. Treatment failure is when a clinical event occurs despite aspirin therapy and is due to a COX-independent process. Pharmacokinetic resistance occurs when the patient does not receive adequate exposure to the drug and is due to many factors including non-compliance, inadequate dosing, poor bioavailability of some preparations, and drug interaction with NSAID's. Finally, pharmacodynamic resistance is defined as not being treatment failure or pharmacokinetic resistance and is the only true aspirin resistance.

The manuscript reviewed the mechanism of action of aspirin, aspirin resistance, and pharmacokinetic resistance. The author also analyzed the strengths and weaknesses of different assays to evaluate aspirin resistance, i.e. aspirin, COX-specific, and global platelet function assays. Based on his experience, the author proposed the use of serum thromboxane as a screening test for identifying patients with aspirin resistance.

CARRASCO-GARRIDO et al. [3] conducted a descriptive, cross-sectional epidemiologic study on the consumption of psychotropic medication by the Spanish population. The authors used individual secondary data collected by the Spanish National

Health Survey (SNHS) in 2001 from the Ministry of Health, carried out on a wide sample of the non-institutionalized Spanish population by direct interview at home

The study found that the consumption of psychotropic medications in Spain is still very considerable, with women registering the highest consumption prevalence and the greatest number of associated risk factors. The authors emphasized the fact that psychoactive drug consumption by both men and women tends to increase with age and a negative perception of health.

LEE et al. [4] investigated the potential association between exposure to ribostamycin in early pregnancy and ototoxicity in the offspring. In a prospective cohort study, 85 women inadvertently exposed to ribostamycin during the first trimester of pregnancy and 170 age- and gravidity-matched control women, were voluntarily enrolled. Newborns were clinically examined at birth by a neonatologist and by imaging studies if any suspicious abnormalities were noted. Hearing was assessed directly by auditory brainstem response. No newborn had neonatal ototoxicity in the exposed group.

Ribostamycin is an aminoglycoside antibiotic used to treat infections caused by gram-negative organisms. In Korea, as in other countries already in use, this antibiotic is primarily used to treat infections such as pelvic inflammatory disease (PID), cystitis, and severe upper respiratory tract infections (URTI). The results of the study suggest that ribostamycin is not ototoxic in the neonates born to women who were inadvertently exposed to ribostamycin in early pregnancy. However, since exposure occurred at  $3.9 \pm 1.5$  weeks, when the inner ear was not yet developed, new studies are required in order to confirm these findings.

The second issue of the journal is a continuation of our original plan to publish relevant studies and to be among the best options for journals covering the topics found in the *Journal of Clinical Pharmacology & Pharmacoepidemiology*. A substantial effort has been made to expedite the review and publication processes. In addition, we have filed the application to gain access to different indexes. Although these challenges appear to be enormous, the support provided by the Editorial Board is encouraging and has facilitated the work of the supporting team.

As always, I would like to express my gratitude to the authors of the published manuscripts for giving us the opportunity to publish their studies in this journal, and to the readers for using us as a source of information.

The Editor

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