

Transcultural psychopharmacotherapy

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S. Chang from Boston presented a review on data currently available regarding ethnicity and lithium kinetics/dynamics. His studies in China (Shanghai) and Taiwan revealed that the kinetics of lithium among Chinese are similar to the Caucasian subjects he studied in Chicago. However, the steady-state therapeutic lithium levels in both Chinese sites (less than 0.8 mEq/L) for the treatment of bipolar disorder, were much lower than those used in Chicago (0.8–1.2 mEq/L), suggesting that there may be ethnic differences in the pharmacodynamics of lithium.

S. Lee from Hong Kong reported a 50% rate of goitres among 50 Chinese psychiatric patients treated with lithium. Their mean TSH level was in the normal range, but significantly higher than that of the normal controls. A higher proportion of the patients (14% v. 2%) also tested positive with thyroid antibody. The reason for this high incidence of thyroid abnormalities among Chinese patients is not clear, but Lee speculated that this could be due to a lower intake of iodine in these patients.

K-M. Lin (California) reviewed four studies comparing the pharmacokinetics of benzodiazepines between Asians and Caucasians. All four studies demonstrated that Asians had slower clearance, longer half-life, and higher plasma drug concentrations. One of the studies suggested that this could be due to differences in the volume of distribution, secondary to ethnic differences in the percentage of fat. This, however, was not supported by the other reports. Since the metabolism of diazepam correlates highly with that of mephenytoin, and the percentage of poor metabolisers of mephenytoin is higher in Chinese (15–20%) as compared to Europeans (3%), this mechanism was examined in another study conducted in Beijing. However, surprisingly, there was no difference in the kinetics of diazepam between Chinese extensive metabolisers of mephenytoin and poor metabolisers while both Chinese groups metabolise diazepam at the rate of European poor metabolisers of mephenytoin. The mechanism of ethnic differences

in the pharmacokinetics of benzodiazepines thus remain unclarified at present.

E. Pi (Lost Angeles) reviewed six studies comparing the pharmacokinetics of tricyclic antidepressants between Asians and Europeans. Three of these studies showed that Asians metabolised TCAs slower than Europeans, while the other two (both conducted by Pi) failed to replicate such findings. He discussed limitations in study methodology that may be responsible for such discrepancies.

Both H. Chiu from Hong Kong and E. Pi from Los Angeles reported prevalence rates of TD in the range of what have been reported in Western countries.

C-K. Lee from Korea reported a study of the ALDH genotype in Korean alcoholics, which revealed that the majority of the alcoholics (84%) did not have the enzyme deficiency. Those with ALDH deficiency were all heterozygotes. These results confirmed earlier findings from Japan, indicating that those lacking ALDH enzymes are much less likely to develop alcoholism. Lee also reported that the alcoholics with enzyme deficiency had different personality profiles, compared to those without the enzyme deficiency.

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Research Centre on the Psychobiology of Ethnicity

Recently established at the Harbor-UCLA campus with major funding from the National Institute of Mental Health (NIMH), the Research Center on the Psychobiology of Ethnicity is the first federally funded research center in the United States that focusses specifically on psychobiological issues relevant to the evaluation and care of ethnic minority patients. Although dramatic ethnic differences in response to various psychotropics and other medications have been repeatedly reported in recent years, the extent of and mechanisms (e.g. pharmacokinetic, pharmacogenetic, and pharmacodynamic) responsible for these differences have remained largely unclarified. Even less understood are the meaning and significance of ethnic differences in psychobiologic processes associated with psychiatric disorders, that have also started to emerge in the literature.

The research activities of the Center will provide much needed guidelines to ensure that diagnostic and treatment practices will be relevant and appropriate

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