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**Expression Levels of Cytochrome P450 Enzymes in *Aldh2* Knockout Mice Following Ethanol Exposure**

Yong-Dae Kim<sup>1</sup>, Heon Kim<sup>1</sup>, Jong-Won Kang<sup>1</sup>, Hong-Mei Nan<sup>1</sup>, Chul-ho Lee<sup>1</sup>,  
Tsunehiro Oyama<sup>2</sup>, Toyohi Isse<sup>2</sup>, Toshihiro Kawamoto<sup>2</sup>, Sung-Il Noh<sup>1</sup>, Sang-Yong Eom<sup>1</sup>  
and Young-Jun Ko<sup>1</sup>

<sup>1</sup>*Department of Preventive Medicine, College of Medicine, Chungbuk National University*

<sup>2</sup>*Department of Environmental Health, University of Occupational and Environmental Health,  
Kitakyushu, Japan*

**Objective :** This study was aimed to evaluate the expression levels of CYP2E1, 2B1/2 and 4B1 proteins in *Aldh2* wild type (+/+) and knockout (-/-) mice after ethanol consumption.

**Method :** We determined expression levels of the enzymes CYP2E1, 2B1/2 and 4B1 in *Aldh2* +/+ and *Aldh2* -/- mice by immunoblotting assay following subchronic ethanol exposure for 8 days.

**Results :** *Aldh2*-/- mice were shown to have higher CYP2E1 (3.5 times), 2B1/2 (1.9 times), and 4B1 (1.4 times) protein expression levels compared with *Aldh2* +/+ mice in spite of absence of ethanol treatment. On the other hand, the protein expression of CYP2E1, 2B1/2 and 4B1 in *Aldh2* +/+ mice were increased by ethanol exposure by 2.3, 1.5 and 1.5 times, respectively. However, in case of *Aldh2* -/- mice, expression levels of CYP2E1, 2B1/2 and 4B1 proteins by ethanol exposure were 1.6, 1.0 and 1.2 times of non-exposed *Aldh2*-/- mice, respectively.

**Conclusions :** These results suggest that CYP2E1, CYP2B1/2 and CYP4B1 participate in ethanol oxidation and that *Aldh2* deficient individuals may be more susceptible to various carcinogens, including ethanol, compared with wild type individuals.

**Keyword :** Cytochrome P450, ALDH2 knockout mice, ethanol exposure