

## **Cytoprotection by DA-9601, a New Antioxidant against Alcohol-induced Gastric Mucosal Damages**

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Although reactive oxygen metabolites are generated during alcohol metabolism, causing oxidative stress and lipid peroxidation in liver, heart, and brain, but the precise underlying mechanisms of alcohol-induced gastric mucosal damage are not fully elucidated. Here we hypothesized that if mediators involved in alcohol-induced gastric mucosal damage can be identified, alcohol-induced gastritis can be prevented by blocking mediators. For that, we administered absolute ethanol (1.5 ml/head) on 200 g Sprague-Dawley rats after overnight fasting *via* orogastric route and sacrificed animals 4 hours after alcohol administration. Based on these results, new group, treated with DA-9601 phytopharmaceuticals possessing antioxidative and cytoprotective actions, was added, which showed significant protection against alcoholic gastritis. CYP2E1 was significantly decreased in drug-treated group. Forty healthy volunteers were administered with 40 ml of 40% alcohol intragastrically onto antrum under the surveillance of endoscopy, divided into two groups (non-pretreated and pretreated with DA-9601, 180mg for 5 days, *po*). Mucosal damages like hemorrhagic spots and erosions were noted in the stomach after 30 min of alcohol instillation, but complete protection was noted in drug-treated group. Conclusively, oxidative stress and ensuing inflammatory reaction were the fundamental basis of alcoholic gastritis and antioxidant should be considered in the prevention or treatment of alcoholic gastritis.