〔Res. Commun. Chem. Pathol. Pharmacol., **49**, 415 (1985)〕

Genetic Toxicity of Several Antihypertensive Drugs Possessing a Hydrazine Group.

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Mutagenicity and genotoxicty of antihypertensive drugs, ecarazine, budralazne, benzerazide, and carbidopa were compared with those of hydralazine whose genetic toxicity and carcinogenicity were well established. Ecarazine and budralazine as well as hydralazine showed apparent mutageniity in Salmonella/microsome test using a strain TA 100 and weak mutagenicity in strains TA 97 and 2637. Benzerazide and carbidopa showed merely weak mutagenicity in TA 100. None of tested drngs except hydralazine exerted any positive result in hepatocyte primary culture (HPC)/DNA repair test, indicating no genotoxic activity of these hydrazide drugs.

〔Shoyakugaku Zasshi, **39**, 71 (1985)〕

A Botanical Origin and Berberine Content of Indo-ohbaku (*Berberis asiatica*).

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Crude drug called Indo-ohbaku has been imported from India as a raw material for the preparation of berberine. This crude drug often includes, as contaminants, broad obovate and coarsely serrate leaves with coriaceaous and remarkable reticulate veins. We obtained twigs with such leaves and inflorescences from the producing center of the crude drug, and identified the botanical origin of the crude drug as *Berberis asiatca* Roxbb R.. This material was contain 2.45-2.55% of berberine (J. P. X method), jatrorrhizine, palmatine, magnoflorine and unidentified alkaloids on TLC. The results showed, that this crude drug was useful as a material for the preparation of berberine.

〔Biochem. Inter., **10**, 343 (1985)〕

Cytolytic Activity of Cytotoxin Isolated from Indian Cobra Venom Against Experimental Tumor Cells.

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Cytolytic activity of cytotoxin isolated from the venom of the Indian cobra (*Naja naja*) on experimental tumor cells was far stronger than that on normal cells such as peritoneal exudate cells, spleen cells, and erythrocytes of the rat. The effect on Yoshida sarcoma cells was temperature-dependent, being stronger at 37°C than at 0°C. Intramolecular disulfide linkages and free amino groups in the cytotoxin molecule were shown to be essential for the lytic action on the cell membrane. Yoshida sarcoma cells treated with 0.1 mM N-ethylmaleimide reduced the cytolytic action of the toxin. Antitumor activity of the cytotoxin toward a Yoshida sarcoma inoculated intraperitoneally into a rat was not observed.