

Ultrastructural Study on the Regeneration of Liver under the Influence of Liv.52

Prasad, G.C. and Gupta, R.C.

Department of Shalya Shalakyia, Institute of Medical Sciences,
Banaras Hindu University, Varanasi, Uttar Pradesh, India.

[Ninth Annual Conference of the Electron Microscope Society of India, December 6-8-1976,
Central Drug Research Institute, Lucknow, (Abstracts page 15)]

In this experimental study, young albino rats weighing 100-120 g were selected, where degeneration of the liver was produced by administering carbon tetrachloride in one group and in another group, by feeding them absolute alcohol till the end of 60 days. The degenerative changes in the liver were confirmed by light microscopy and also by Electron microscopy. Liv.52 drops were given orally in both the groups, either along with the carbon tetrachloride or absolute alcohol. Whereas in the other group, Liv.52 drops were given after the production of degenerative changes for further 30 days. Animals were sacrificed at the end of 60 and 90 days after the experiment. After sacrificing them, liver tissue was examined microscopically and then dissected out. The tissue was then fixed in glutaraldehyde solution and then osmic acid. After dehydration the tissue was embedded in araldite solution, sections were cut at Porter Blum ultra-microtome and stained with uranyle acetate and lead nitrate. Degenerative changes in the liver cells including fibrosis in the form of formation of collagen fibrils could be seen. When Liv.52 was given orally to these animals, there was reappearance of endoplasmic reticulum, ribosome and mitochondria along with disappearance of collagen fibrils. Similar effects of Liv.52 on alcohol-treated animals also could be demonstrated. The data suggest regenerative effect of Liv.52.

(Emphasis is ours)