certain effect on triglyceride and lipoprotein synthesis and or secretion.

It appears that Kotatoxin is a toxic substance which may be injurious to human liver either as a sole toxic factor of in combination with other mycotoxins. Further studies on this problem are needed to elucidate the role of this mycotoxin as a cause of human toxic liver disease.

SUMMARY

Aspergillus glaucus B. Kota is a toxigenic mold isolated from left over cooked rice obtained from a household which had lost a child to Reye's syndrome, in the northeast of Thailand.

Chloroform soluble extract (CEX) of the toxic metabolites from Aspergillus glaucus B Kota culture is highly toxic to rats when given orally. Precipitation of the CEX in petroleum ether yields a pinky light powder (PEI fraction) which has very acute toxic effect to rats when administered intraperitoneally.

In short term experiment on acute intoxication with CEX and PEI fraction prepared from Aspergillus glaucus B. Kota culture, severe fatty metamorphosis of the liver is not produced at the dose and time studied. Course reticular appearance of the nucleoli is observed in some of the toxin treated and DMSO injected control rat liver cells, nuclei are normal as compare to normal controls. Rare fat like droplet is present in the nucleci of about 2 percents of the affected liver cells.

Depletion of glycogen is observed throughout the experiment, and appears to return to normal at late stage in survived rats.
The endoplasmic reticulum of CEX treated liver cells are dilated in severely injured periportal cells, accompanied with ribosomal detachment. Proliferation of the ER is noted in less affected cells and at late stage of the experiment. In those treated with PEI fraction, the number of RER is decreased, some ribosomal detachment is observed. Liposomes are greatly increased in PEI treated liver cells, and appear as electron dense droplets in diluted cisternae of CEX treated liver cells.

The mitochondria are unaltered in structure after treatment with both forms of toxins, but they do not have intramitochondrial granules and show slight swelling with light matrix in PEI treated liver cells which correlates to diminishing of the activity of succinate dehydrogenase at late stages of both series.
Name: SIRIPORN SRIURAIRATANA

Date of Birth: July 26, 1940

Place of Birth: Nakorn Sawan, Thailand

Institution attended: Faculty of Pharmacy

Occupation:

FESCO LABORATORY ......................... 1962-1964

SEATO MEDICAL LABS ...................... 1964-1966

Faculty of Graduate Studies ............ 1966-1971