

P R E F A C E

Liquid paraffin is mostly used as safe purgative and is used in all the types of ointments indicating its common use. It is considered as inert chemical and hence used commonly as the vehicle in administration of CCl_4 and adjuvant (used in immunological studies and immunological applications). In earlier studies (Devarshi et al., 1982) Liquid paraffin has been used as vehicle considering it as inert, but rats, which were used as vehicle treated, i.e. paraffin treated controls showed foggy hepatic necrosis along with loss of hematoxyline staining character of nuclei of hepatocytes.

These results have initiated us to study the toxicological effects of liquid paraffin in a systematic way in albino rats.

Thus the dissertation is aimed to study the effects of liquid paraffin on liver, being the main organ involved in drug detoxication and kidneys as important excretory organs which handle the excretion of detoxication products. Microsomes being the main cell organelle that processes the xenobiotics, have been studied in detail. Glutathione is also one of the endogenous ligands which are important in in vivo handling of Xenobiotics and therefore, it is also studied in present dissertation.

Dissertation is represented as -

Chapter I - "Introduction" which includes review of relevant literature.

Chapter II - "Material and Methods" gives experimental schedule and methodology.

Chapter III - "Histology" - mainly describes the alterations in histological elements.

Chapter IV - "Microsomes" - gives all the parameters related to microsomal metabolism.

Chapter V - "Glutathione" - which is estimated from cytosolic fractions.

Chapter VI - "General Discussion" - the results of all the chapters are discussed to conclude the toxicity level of liquid paraffin.
