

P R E F A C E

The idea about the present work was derived from a previous work done in this department. While realizing its immense possibility and applicability in the clinical field yet its limitation in such application for one dreaded complication which invariably occurs during hypothermia necessitated in the present attempt for reinvestigating this vexed problem. Originally it was planned to carry out the work in dogs as experimental animal for their accepted suitability for such works, which subsequently proved too expensive. The dogs were then replaced by cats which, however, proved to be almost equally useful for this sort of work. All possible attempts have been made to make the presentation simple and statistical treatment exact. Temptations to carry on the investigation at the mitochondrial level, as initially proposed, had to be abandoned due to non-availability of facilities as well as the necessary investigative materials in this country. Nevertheless, the work had to be carried out under the continued strain of non-availability and high expense of some of the rare chemicals and drugs used in the course of the present investigation. No attempt however has been made to prolong the thesis work unnecessarily.