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Introduction

Pharmacology is the study of the effects of drugs on living organisms. It includes the biological actions of chemicals and the mechanism of action. We should be able to describe and quantify both the desirable and undesirable effects in laboratory animals and such observations can be extrapolated to the human beings. Experimental pharmacology thus helps in understanding the nature of drug action in therapeutic form and in toxicological aspects. The experiments can be carried out in intact animal or in isolated tissues.

In whole animal experiments (e.g. dog, mice, rabbit, etc.), the effect of drugs on the organs are influenced by many factors such as blood supply, metabolism, distribution, nervous control, hormonal influences, bioavailability, etc.

In isolated preparations, the direct mechanism of action of drug can be studied. Moreover, this is cheap and can be studied for different drugs on different types of tissues by sacrificing one animal.

Laboratory animals can be bred and maintained in the laboratory under suitable conditions. The common laboratory animals are mice, rat, guinea pig, frog, dog and rabbit.

All animals as a rule should be handled in humane method. Animals should be in no case suffer from pain. The health of the animals should be maintained. When they are sacrificed, the approach should be euthanasia (painless death).

The Prevention of Cruelty to Animal's Act of 1960 provided for the constitution of a committee to oversee the conduct of experimentation of animals. The CPCSEA (Committee for the Purpose of Control and Supervision of Experiments on Animals) was established under that provision. The Experiments on Animals (Control and Supervision) Amendment Rules (1998) and the Breeding of the Experimental Animals (Control and Supervision) Rules (1998) gave power to the CPCSEA to make rules in relation to the conduct of experiments on animals, the power to authorize any of its officers to inspect any place (at any time), and the power to prohibit a person or any institution from carrying out experiments on animals. Mrs Menaka Gandhi, a former minister and an animal right activist of repute, took over as its chairperson and brought out sweep changes in the manner in which animal experiments were being conducted in the country. The guidelines made it clear that all laboratories doing animal work had to be registered with the CPCSEA and had to follow a set of rules. To implement these guidelines, the CPCSEA appointed its nominees, usually people who were animal right's activists themselves or cared about animals.