BLUE MOUSE IN PHARMACOLOGICAL TESTING.

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Chemically induced blue mouse was developed in this laboratory in order to be a living animal model for testing of an irritating-, an antiinflammatory- and a cutaneous vasodilating effect of a chemical. Evan's blue (5 mg in 0.2 ml) was injected via femoral vein of a mouse anesthetized with pentobarbital sodium. After recovery from the anesthesia the mouse was used for a test. This experiment was planned to compare an antiinflammatory effect of extracts from the leaves of Gynura integrifolia Gagnap, diclofenac emulgel and clobetasol propionate cream. These drugs were topically applied to both ears twice on the experimental day, at 4 h before and once after the dye injection. Thirty minutes after the last application of the drug, a mixture of croton oil and pyridine was applied to one ear by a forceps (10 sec). At 3, 4, 5, 6 and 8 h after the croton mixture, the ear thickness was measured by a micrometer, the ear was weighed and extracted with acetone for the dye leakage determination at 620 nm spectrophotometry. The results of these three parameters showed an antiinflammatory effect of G. integrifolia, diclofenac and clobetasol. Topical application of G. integrifolia was as effective as its oral administration in this animal model. The development of the herb as a topical antiinflammatory preparation is to be formulated in the next study.