

compared with 4.8 mm. and 2.9 mm. respectively in the controls. The acceleration of the growth of the primary tumor by cholesterol is not very evident in the metastatic stage (31st to 38th days), but the tendency to form metastases and the rate of metastatic growth are very markedly increased.

Lecithin, on the contrary, diminishes the tendency to form metastases, retards metastatic growth when it does occur and, in some instances (the "Local" animals) also retards the growth of the primary tumor in the post-metastatic period.

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Note on the cock's comb test for the activity of ergot.

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The cock's comb test has become a popular method of determining the activity of ergot preparations. It was introduced because gangrene frequently occurred in epidemics of ergot poisoning, and because bluing of the cock's comb was believed to be due to arterial constriction. This view was supported by von Recklinghausen's interpretation of the microscopical examination of the comb in chronic ergot poisoning of cocks. We were impressed by the fact that in ergot poisoning often the only pathological feature was venous dilatation and we believe that venous dilatation is probably the real cause of the bluing of the comb. It is admitted that the intravenous injection of epinephrin causes a rise in blood pressure, mainly from vaso-constriction and we have found that it will blue the cock's comb, but the bluing only comes on as the blood pressure falls and persists for an hour or two; in other words it occurs at a time when arterial-constriction has subsided. Large doses of paraldehyde given per os, or the inhalation of amyl nitrite, will also cause bluing of the comb.

On subcutaneous injection neither adrenalin nor p. oxyphenylethylamine caused this bluing. Dale claims that much of the activity of ergot preparations is due to p. oxyphenylethylamine. Now while the subcutaneous injection of 25 mg. of p. oxyphenylethylamine caused marked symptoms in cocks, there was no bluing, hence one would argue that the subcutaneous injection

of ergot into cocks cannot be considered a quantitative method for testing ergot. Oncometric studies of the cock's comb during acute ergot poisoning are now being made.

44 (740)

An experimental study of poison oak.

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Experiments show that the toxic principle of *Rhus diversiloba* while not volatile can poison at a distance by means of mechanical carriers. It is not destroyed by subjection for one hour to 100° C. and is carried, potent, by the smoke from burning *Rhus* plants. The dermatitis produced by this plant is a purely local affection and is not spread by the blood or lymph or by the serum of the blebs. The reaction of the sweat has no relation to individual susceptibility.

Absolute immunity in man has been claimed but was not found to exist, on repeated attempts, in any of the individuals tried (6 persons). In spite of the work of Ford, the conclusion is arrived at that experimental immunity in animals to *Rhus* toxin has not been proved. The author, working with pure toxin (glucoside) produced by the method of Syme, was unable to intoxicate animals with any reasonable amount. Ford's work was done with a commercial fluid extract containing various impurities. A permanent aqueous suspension of the alcoholic solution of the pure toxin can be prepared, and remains toxic for the human skin. As much as 0.025 gm. of this preparation of toxin can be given intravenously to a 2,000-gram rabbit without fatal effect, and as much as 0.03875 gm. can be given to a 280-gm. guinea pig subcutaneously without fatal effect. Pure alcoholic extract when given subcutaneously produces severe necrosis and death owing to the alcohol itself used as a menstruum, but with no lesions attributable to the toxin. No skin lesions were produced in monkeys, rabbits, or guinea pigs as a rule, but a slight dermatitis was produced on the rabbit's ear at times.