

the daughters. The variation (mutation) has persisted through four generations.

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Chemical pneumonia.

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The use of chloramine T solution in the treatment of inflammations of the nose and throat suggested to us that the solution might be useful in the curative treatment of pneumonia experimentally produced in dogs.

By intrabronchial insufflation of a definite dose per kilo of a virulent pneumococcus culture, it was possible to cause a pneumonia which proved fatal to dogs in about 36 hours. Insufflation of 5 c.c. per kilo of 1 : 10,000 solution of chloramine T in dogs previously insufflated with pneumococci brought out the fact that the treated dogs were harmed instead of benefited. The chloramine T was then used alone in normal dogs. In doses of 5 c.c. per kilo of a 1 : 10,000 solution it produced consolidation of the greater part of one or more lobes, with marked congestion and edema of both lungs. Microscopically the lesion was a broncho-pneumonia, with some intra-alveolar hemorrhage. Dakin's hypochlorite solution used in the same way caused a similar lesion, even in dilutions of 1 : 20,000. Bichloride of mercury in 1 : 10,000 solution produced rather more hemorrhage than the chlorine compounds did. Cultures made from the consolidated areas of all the lungs failed to grow. The pneumonia produced by these chemical substances was sterile.