the ability of the kidney to eliminate phenolsulphonephthalein. Furthermore, at this stage of the mercury intoxication the kidney shows no evidence of injury but shows on the contrary a convoluted tubule epithelium with nuclear and cytoplasmic changes, indicative of a functionally active state.

4. At this early stage of the intoxication by mercuric chloride there occurs a reduction in blood urea. This decrease in blood urea has been associated with the development of degenerative changes in the liver which first make their appearance in the periphery of the liver lobule.

5. Associated with such changes in the liver and prior to the development of the kidney injury there occurs a reduction in the alkali reserve of the blood.

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## Mercury saligenin, a new antiseptic.

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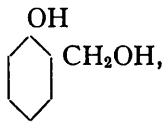
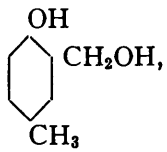
The early studies of G. Cohn on saligenin and homosaligenin and the recent investigations of D. I. Macht on benzyl alcohol have demonstrated that these substances are mild antiseptics. We have studied the action of saligenin,

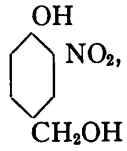



homosaligenin,

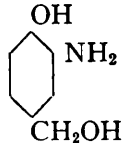



[1] The researches reported in this investigation were made possible by the aid of funds granted by the United States Interdepartmental Social Hygiene Board for the discovery of more efficient medical measures in the treatment and prevention of venereal diseases.

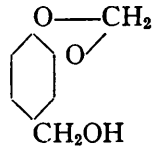
parahydroxymeta nitrophenylcarbinol,




parahydroxymetaaminophenylcarbinol ("Edinol"),

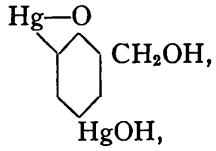



and have found that all of these substances are weak antiseptics. One or two per cent. solutions kill the bacillus coli, staphylococcus albus, streptococcus hemolyticus pneumococcus and gonococcus after 60 minutes exposure. Piperonyl alcohol,



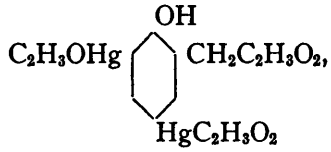

is still weaker.

We have prepared a mercury compound of saligenin,

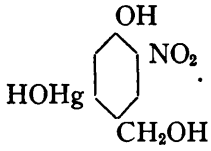



whose sodium salt is water soluble. Solutions of this compound possess about the the same antiseptic power as $HgCl_2$, *i.e.*, 1:10,000 solutions kill staphylococcus, bacillus coli and gonococcus in five minutes and streptococcus hemolyticus in ten minutes in bouillon cultures, while in beef serum bouillon 1:500 solutions kill in five minutes. Mercury saligenin is not a dye, and it is much less irritant to mucous membranes than is $HgCl_2$, so that a 1:1000 soluion can be held in the urethra for five minutes without burning or subsequent irritation. We are therefore testing it clinically in anterior gonorrheal urethritis with encouraging results.

An acetate of this compound,



has also been prepared. Its water soluble sodium salt has the same antiseptic action as that of the mercury saligenin, but no greater. We have also prepared the mercury compound of parahydroxymetanitrophenylcarbinol which yields a monomercury derivative, probably



The sodium salt of this compound has the same antiseptic strength as to the other two mercury compounds.

Attempts at the chemotherapy of trypanosomiasis (brucei) and spirillosis (obermeyeri) in rats by the use of saligenin, piperonyl alcohol and mercury saligenin have thus far yielded only negative results.