may return to the normal level on the fourth or fifth day. In general the larger doses have produced the more marked decrease. The total nitrogen, urea and sodium chloride decrease fairly proportionately to the water. During the period of drug action, that is when the output of urine is definitely decreased, the renal function seems unimpaired, since water, urea and sodium chloride added to the regular diet, are excreted by the kidney in a normal fashion. Phenolsulphonephthalin also is excreted in the same percentage as during the control period. We have analyzed the blood during the control period and during the period of drug action. In this latter period, when the urine output is below the normal, the non-protein nitrogen, urea nitrogen and sodium chloride in the blood are decreased. This does not appear to be due to an increase in water in the blood since the percentage of water is also slightly decreased.

From these results we conclude that there may be two factors which determine the diuretic action of these drugs in the dog and probably in man, one an action on the kidney, similar to that in the rabbit tending to cause diuresis, a second and determining one on the tissues in general, as a result of which water and excretory products are held back by the tissues.

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Cholesterinized alcoholic extracts versus acetone insoluble fraction of pure tissue lipoids as antigen for Wassermann reaction.

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In the last few years a number of workers in this country have reported favorably on the use of cholesterinized antigens for Wassermann reaction. According to some reports, these so-called reinforced antigens gave even more satisfactory results than the acetone-insoluble fraction of tissue lipoids advocated by Noguchi.[1]

[1] Noguchi and Bronfenbrenner, *Jour. of Experimental Medicine*, 1911, Vol. XIII, No. 1, p. 43.

In studying the rôle of cholesterin in the preparation of antigen we came to the following conclusions:

The apparent superiority of reinforced antigens is not due to the heightened specificity of these antigens, but to a heightened anticomplementary power of the same.

In addition, cholesterol retards and, if used in sufficient connection, greatly protects the blood cells from the action of hemolytic agents, thus further increasing the tendency towards a higher percentage of positive reactions.

That this influence of cholesterol is not specific is evidenced by the fact that more recently different authors noted the occurrence of nonspecific fixations obtained with reinforced antigen in a high percentage of normal cases.

The erroneous procedure recommended by some of the recent texts of using ½ to ⅓ of anticomplementary dose of reinforced antigen in the test may increase the occurrence of nonspecific fixations up to 40 per cent. of normal cases, as reported by some of the investigators.

On the other hand we found that removing all the cholesterol from the tissue extracts actually improves them for the use in the complement fixation test.

By redissolving and reprecipitating the acetone insoluble fraction of tissue lipoids one does not diminish its antigenic value, while one very markedly decreases its anticomplementary power.

The antigen prepared in this way can be used in the amount 10 or even 20 times smaller than the dose fixing 1 H E unit[1] of complement, and yet even such minute amounts of antigen may contain considerably more than 10 antigenic units.

In general we can not but discourage the use of cholesterinized antigens in favor of reprecipitated acetone insoluble fraction of tissue lipoids free from cholesterol.

[1] Bronfenbrenner and Schlesinger, *Am. Jour. of Syphilis*, April, 1917.