From the above results it is evident that our original conclusions are correct. Cholesterol has an accelerating action on malignant tumor growth, whether it be injected into the tumor, or carried to it by the circulation.

25 (842)

Nephritis in ground squirrels (Citellus Beechyi).

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In the course of the examination of about 250,000 ground squirrels for plague 6 cases were noted in which there were gross lesions in the kidneys and which on microscopic examination presented evidence of chronic nephritis.

In one of these the lesions were very much like those in the experimental uranium nephritis of rabbits. There were large areas of cellular infiltration and fibrosis with atrophy of the tubules. The capsules of the glomeruli in these areas were slightly thickened. Some of the glomeruli showed a marked cystic dilatation. Other parts of these kidneys were practically normal except for a partial necrosis of the epithelium.

Two other specimens resembled closely the type of spontaneous nephritis in wild rats described by us in the *Journal of Medical Research* (1912, XXVI, 249). There was the same granular degeneration, necrosis and desquamation of the epithelium in some places with marked regenerative proliferation of the epithelium in others. There was the same tendency to the formation of epithelial cysts. The glomeruli showed some enlargement and proliferation of the capsular epithelium and a slight fibrous thickening of the capsule itself. In the interstitial tissue we found irregular areas of cellular infiltration and more or less fibrosis.

The three remaining cases were the most interesting ones in that they showed an entirely different type of the disease associated with the accumulation in many, usually somewhat dilated, tubules

of colorless crystalline masses which seem to consist of thick rhomboidal plates closely joined together in the form of rosettes. Sometimes they are so tightly packed as to form solid spherical bodies. One of us (Ophüls) has observed similar deposits in a human kidney in a case in which the renal pelvis was filled with large stones, apparently composed largely of urates. It seems most likely that these deposits are also deposits of urates. No evidence of stone formation in the pelvis was however present in the squirrels. The histological lesions in the squirrels are also similar to those in the human case mentioned. They involve the interstitial tissue very largely and have caused, in two cases especially, a very extensive development of cellular connective tissue with much destruction of kidney substance. The glomeruli in these areas show a slight fibrous thickening of their capsules. The rest of the tubules were normal except in one case in which there was some degeneration and evidences of proliferation in the tubules, similar to that found in the second type which resembles rat nephritis.

It is hardly necessary to say that arterial lesions were carefully searched for but there was no evidence of them in any of the specimens.

26 (843)

Experimental embolism of the arterioles in guinea pigs with hardened erythrocytes of Triton (Diemy Aylus) torosus and of Chondrotus tenebrosus.

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The experiments were suggested by a desire to determine experimentally the changes, if there are any, which follow the complete obstruction of the vasa afferentia of the glomeruli of the kidney in mammals. A blocking of such small vessels may be accomplished by the use of the large erythrocytes of newts or salamanders which may be conveniently hardened in Orth's fluid, then washed in water, suspended in sterile salt solution and injected