the added phosphorus to be recovered, even when urea is added besides the sugar. It is evident that we deal here with an important anabolic influence of the urea, which, in the serum or tissues, is not merely a waste product, as it is as a rule considered in the urine.

7537

Behavior of Blood Cholesterol Following Injections of Tuberculin.

KATSUJI KATO. (Introduced by B. Hamilton.)

From the Department of Pediatrics, University of Chicago.

The literature gives but scant attention to the relation of cholesterol to tuberculosis. It has been found by a few observers that the blood cholesterol is definitely decreased during the activity of the tuberculous process, and this hypocholesterolemia, therefore, may be regarded as an index of poor prognosis. With the improvement of the pathologic process, however, the blood cholesterol rises and during convalescence it may be increased above the normal level. The present experiments endeavor to study the behavior of total blood cholesterol in rabbits following injections of old tuberculin.

A total of 10 rabbits were divided into 2 groups. The first group of 6 rabbits (average weight 1660 gm.) received single injections of 1 :10 dilution of old tuberculin, and the blood cholesterol was determined daily by the Bloor method as modified by Sackett. The results are summarized in Table I.

The second group of 4 rabbits (average weight 3340 gm.) were first sensitized by repeated injections of old tuberculin over periods varying from 10-60 days. After rest periods of 2-6 months, these animals were given single injections of tuberculin and the blood

TABLE I.
Blood Cholesterol in Unsensitized Animals.

Observed	Female 1725 gm.	Female 1400 gm.	Male 1750 gm.	Female 1725 gm.	Female 1725 gm.	Female 1650 gm.
5-26	138	113	100	118	120	150
5-28	202	212	225	—	275	200
5-29	192	300	137	202	170	267
5-29	0.2 cc. 1/10 O.T.		1.0 cc. 1/10 O.T.		3.0 cc. 1/10 O.T.	
	Intraven.	Subcut.	Intraven.	Subcut.	Subcut.	Intraven.
5-30	313	380	300	332	375	288
5-31	201	282	283	289	263	220
6-1	190	267	287	240	197	250
6-2	195	325 (?)	195	193	203	215
6-3	193	260	267	214	195	312

cholesterol was followed by the same method as in the first group of animals. The results are summarized in Table II.

TABLE II
Blood Cholesterol in Sensitized Animals

Observed	Female 3400 gm.	Female 3150 gm.	Male 3250 gm.	Female 3550 gm.
5-15	174	273	170	207
5-16	155	269	197	173
5-17	149	275	181	—
5-17	0.1 cc. 1/10 O.T. Intraven.	0.5 cc. 1/10 O.T. Subcut.	1.0 cc. 1/10 O.T. Intraven.	1.0 cc. 1/10 O.T. Subcut.
5-18	255	330	375	156
5-19	325	415	675	415
5-21	373	547	266	357
5-22	200	—	145	110
5-23	231	347	162	150
5-24	195	168	110	100
5-25	148	165	107	83
5-29	215	225	150	165
6-1	250	235	153	230
6-3	275	287	265	150

The results indicate that these animals respond to the single injections of tuberculin with prompt though transient hypercholesterolemia. This is followed within a week by a return to normal value, which in some instances is first preceded by a fall below the normal level.

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Bactericidal Power of Blood in Chronic Arthritis.

FLOYD BOYS, F. D. GUNN AND S. J. LANG.

From the Department of Pathology, Northwestern University Medical School and Evanston Hospital Arthritis Clinic.

There is considerable evidence that chronic rheumatic joint disease, as well as acute rheumatic arthritis, is neither strictly a metabolic disturbance nor purely allergic in character but the result of hematogenous streptococcic infection of the joints. This evidence is of 4 types: the demonstration of streptococci in involved joints with typical structural alteration in direct relation to the actual distribution of the bacteria;[1, 2, 3] the streptococcemia which occurs at

[1] Forkner, C. E., Shands, H. R., and Poston, Mary A., *Arch. Int. Med.*, 1928, **42**, 675.

[2] Cecil, R. L., Nicholls, E. E., and Stainsby, W. S., *Arch. Int. Med.*, 1929, **43**, 571.

[3] Wetherby, M., and Clawson, B. J., *Am. J. Path.*, 1932, **8**, 283.