tions of adrenalin around the tumors; and in 9 of the 21 rats in which the subcutaneous tissue had been damaged by injections of adrenalin prior to implantations of tumor grafts. The challenge grafts grew in the 6 rats in which chloretone had inactivated the tumor tissue implanted on the right side. The results showed that resistance to growth of subsequent grafts of native tumor tissue had become established in 40 of the 61 rats treated with adrenalin in the experiments described. The tumor inhibitory action seemed to be caused by damage to the vascularization of the tumor tissue, followed by its absorption.

The characteristic loss of hair previously noted in rats that received minced adrenal glands (*1*) took place in these rats treated with adrenalin.

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Erythrocyte Aggregation Factor in the Plasma and Serum of Patients with Acute Lupus Erythematosus

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It is the purpose of this preliminary communication to report a phenomenon heretofore not described, namely, aggregation of washed "O" group Rh-positive erythrocytes in a mixture of egg white and fresh plasma and serum obtained from patients with acute lupus erythematosus. The aggregation phenomenon occurs following refrigeration for ½ hr.

The erythrocyte aggregation factor is not destroyed by activating the plasma or serum at 56° C for 30 min. Strong positive plasma or serum kept at room or refrigerator temperature for 10 days gave weak to negative reactions; when kept in the frozen state for one month, positive reactions were obtained which compared favorably with the original result.

The plasma and serum samples containing the erythrocyte aggregation factor also produced the so-called L. E. cell phenomenon (*1–3*).[2] No red blood cell aggregation occurred in a control series of plasma and serum samples obtained from 150 normal subjects.

The test is carried out as follows. Fresh egg white is filtered through 2 layers of gauze, and 10 ml of the filtrate is diluted with 90 ml of physiological saline solution. The egg white is placed in the refrigerator for 24 hr. Group "O" Rh-positive erythrocytes are washed in saline solution, and a 10% suspension is made and stored in the refrigerator for 1 day.

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[2] We are indebted to L. Berman, Department of Pathology, College of Medicine, Wayne University, Detroit, Mich.; G. L. Pease, Division of Clinical Laboratories, and M. M. Hargraves, Division of Medicine, Mayo Clinic, Rochester, Minn., for supplying plasma samples obtained from patients with acute lupus erythematosus.

To assure an even mixture of the egg white, the solution is shaken, and 1 ml is placed in a Wassermann tube. To the egg white 0.5 ml of test plasma or serum and 1 drop of the red blood cell suspension are added. The tube is shaken until the erythrocytes are well dispersed. The test is then placed in the refrigerator for ½ hr. Upon removal, the test is centrifuged at 2,000 rpm for 1 min. The tube is gently shaken until the red blood cell button is completely broken up. A positive test shows easily visible clumps of erythrocytes. A normal control is simultaneously shaken along with the test, since the reading is started when the erythrocytes in the control are homogeneously dispersed.

A 5-tube quantitative test may be set up, and the degree of clumping recorded as 1, 2, 3, and 4+, adding amounts of plasma or serum corresponding to the test-tube number—that is, 1 drop in the first tube, 2 drops in the second tube, and so on.

A positive test may be kept in the refrigerator for several days without an appreciable breaking up of the red blood cell clumps. The clumps disappear when the test is placed in a water bath at 56° C for 1 min or at 37° C for 5–10 min. The erythrocyte aggregation phenomenon can be reinduced by placing the test in the refrigerator for ½ hr, then centrifuging and shaking as above.

Whether the cold phenomenon reported here and the so-called L. E. cell phenomenon are produced by the same factor, and whether this factor is common to diseases other than lupus erythematosus, are being investigated.

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Insect Transmission of Western X-Disease of Peaches[1]

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Western X-disease has been reported as the most serious virus disease of peaches in the northwestern United States and British Columbia (*1*). Similar diseases occurring on peach have been described under the name leaf casting yellows in California (*2*) and X-disease in northeastern United States and adjoining areas of Canada (*3*). The disease on peach in

[1] Published as Scientific Paper No. 969, Washington Agricultural Experiment Stations, Institute of Agricultural Sciences, The State College of Washington, Pullman. Federal support of the work has been from RMA funds. The Oregon State Agricultural Experiment Station has also participated in these investigations.

[2] The initial work of H. R. Wolfe from 1947 to 1949 received support from the Washington State Department of Agriculture.

[3] The work of E. W. Anthon has been supported in part by the USDA.