

digitalis in this series was usually low (1.1 gm.). When on occasion we gave larger doses of digitalis, more striking effects on the T-wave were observed.

48 (1508)

**The isoagglutinins and isohemolysins of the rat.**

By **G. L. ROHDENBURG** (by invitation).

[*From Columbia University, George Crocker Special Research Fund, F. C. Wood, Director.*]

The possibility that some of the irregularities in immunity against transplanted tumors might be correlated with the isoagglutinins or isohemolysins of the respective hosts prompted an investigation of these substances in the blood of rats. The animals tested were derived from three different sources showing rather marked external as well as biological differences. One group, pure white in color, was resistant to the growth of the Jensen rat sarcoma, showing a very high percentage of natural immunity; a second group, red and white in color, was equally resistant to the growth of the Flexner-Jobling rat carcinoma; a third group, hooded black and white, was equally susceptible to both tumor strains.

Fifty animals were tested in the following manner for the presence of either isoagglutinins or isohemolysins. Nine drops of serum were mixed with one drop of a 5 per cent. suspension of washed red cells in a test tube. In the first series of ten animals the serum of each animal was tested against the cells of every other animal, and the cells of each animal were tested against the serum of every other. Five series were carried through in this fashion, each series consisting of three animals of two of the groups and four of a third group.

Tests between animals of the same strain or between animals of different strains showed that neither agglutinins or hemolysins were demonstrable, this being contrary to the well-established phenomena in man, where four distinct groups have been found.