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Effect of Antipneumococcus Sera on Leucocytes in vitro and on the Agglutination of the Red Blood Cells.

JESSE G. M. BULLOWA, MILTON B. ROSENBLUTH AND A. K. MERKIN.*
(Introduced by Wm. H. Park.)

From the Littauer Pneumonia Fund of New York University and the Medical Service of Harlem Hospital.

In the specific antibody pneumococcic horse sera (Felton¹ and Banzhaf²) heteroleucotoxins for certain human white cells, analogous in action to the isoleucotoxin of Doan,³ were found, though never in titre strengths exceeding 1 in 18. Unfortunately, these observations invalidate this *in vitro* procedure as a probable cause of, or test upon which to base prediction of chill reactions in the serum treatment of pneumonia cases.

The incidental observation that a chill producing serum did agglutinate the red cells in vitro, whereas a non-chill producing serum did not produce such heteroagglutination of the human red cells, induced us to restudy this phase of the question. Our studies confirm those of Kolmer and Matsumoto (1920) in that the in vitro agglutinations have been found to bear no constant relationship to serum reactions. The small amounts of slowly injected serum apparently have no appreciable effect on the circulating red blood cells.

The distribution of blood groups in 100 cases of pneumonia was observed and showed the usual distribution.

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A New Agglutinable Factor Differentiating Individual Human Bloods.

K. LANDSTEINER AND PHILIP LEVINE.

From the Laboratories of the Rockefeller Institute for Medical Research.

By absorbing a number of anti-human blood immune sera from rabbits with the blood corpuscles of certain individuals regardless of the group, fluids were obtained from a few sera which give a

[•] With technical assistance from Miss Mabel Chatfield.

¹Felton, L. B., Boston Med. and Surg. J., 1924, exc, 819.

² Banzhaf, E. J., Johns Hopkins Hosp. Bull., 1911, xxii, 241.

³ Doan, C. A., J. Am. Med. Assn., 1926, lxxxvi, 1593.

⁴ Kolmer, J. A., Matsumoto, M., J. Immunol., 1920, v, 75.