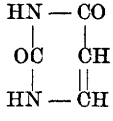
No. of Cases	Reaction to O.T.	Reaction to "Residue Antigen"
14 patients	0 10 mg.	0 0.07 mg.
2 patients	+ only to 1 mg.	+ only to 0.07 mg.
2 patients	+ only to 0.1 mg.	+ only to 0.007 mg.
4 patients	+ only to 0.01 mg.	+ only to 0.007 mg.
17 patients	+ only to 0.01 mg.	+ only to 0.007 mg.
3 patients	+ only to 0.01 mg.	+ only to 0.0007 mg.
1 patient	+ only to 0.001 mg.	+ only to 0.0007 mg.
11 patients	+ only to 0.001 mg.	+ only to 0.00007 mg.

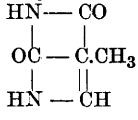
In the known tuberculous adults the reaction to a small amount of "residue antigen" was a sharp, well-defined area of injury without much swelling or redness, which was easily seen to be positive when measuring only 5 x 5 mm.

With the general plan of testing out the various non-protein derivatives of the tubercle bacillus as Professor T. B. Johnson could give them to us in pure form, we have made tests with a few nucleic acid derivatives which he had immediately available and very kindly gave to us. After preliminary toxicity tests in animals, intracutaneous injections of 20 mg. were made on five adults who showed marked positive reactions to 0.1 mg. of O.T. The following substances were used. There were no reactions.

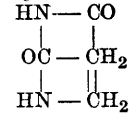
Uracil



Thymine



Hydro-uracil



The negative tests reported here are of interest only insofar as they indicate that these simple derivatives, if they were split off by the mechanism of the specific reaction, would not cause the type of injury under discussion.

225 (2457)

Further experiments on the antirachitic action of yolk of egg.

By ALFRED F. HESS and MILDRED WEINSTOCK.

[*From the Department of Pathology, College of Physicians and Surgeons, Columbia University, New York City.*]

In previous communications[1] it was shown that egg yolk is

[1] Hess, A. F., The therapeutic value of egg yolk in rickets, PROC. SOC. EXP. BIOL. AND MED., 1921, xx, 369; *J. Am. Med. Assn.*, 1923, lxxxi, 15.

able to confer protection or bring about cure in rickets, both in infants and in rats. Further experiments have shown that as little as one drop (0.05 gm.) a day (fed by pipette) is sufficient to protect rats which are on a ration markedly deficient in phosphorus. It is of much less protective value when the rats are given a rickets-producing dietary very low in calcium. Boiling the egg for twenty minutes does not appreciably diminish the potency of the yolk in relation to rickets. Drying the yolk and keeping it in a dried state markedly reduces its antirachitic value. When 0.05 gm. was given subcutaneously, the yolk did not confer protection, but this was accomplished by injections of 0.15 gm.

Various fractions of egg yolk were tested in protective experiments on rats receiving the low phosphorus diet. It was found that the non-saponifiable fraction was protective and a preparation was obtained about 90 times as concentrated as the original yolk. It is, however, possible that its potency is not restricted entirely to this fraction.

226 (2458)

A study of hypersensitiveness to derivatives of hemolytic and non-hemolytic streptococci. (Preliminary report).

By GEORGE M. MACKENZIE and FRANKLIN M. HANGER, JR.

[*From the Department of Medicine of the College of Physicians and Surgeons, Columbia University, and the Presbyterian Hospital, New York City.*]

Hemolytic and non-hemolytic streptococci obtained from the interior of tonsils immediately after tonsillectomy have been used for the preparation of filtrates and extracts of intact organisms. A large number of patients with a variety of conditions has been tested by the intracutaneous method with these preparations.

The present report deals chiefly with certain reactions obtained with filtrates of young broth cultures. The intracutaneous injection of 0.01-0.04 cc. has produced in nearly all adults positive re-