

uses of the nose and throat, such as frontal sinusitis, ethmoiditis, otitis media and and mastoiditis.

It may be mentioned here that evidence points strongly toward this group of diseases being caused in each case by a specific filterable virus. A third similarity is the recognized life long-immunity in the case of flu.

One is bound to ask himself the question as to whether the production of this life long immunity has taken away the power of the body to break down the substance of invading organisms which subsequently find an entrance.

The literature does not give much evidence of conclusive work along this line. Kolmer however has proved that during the first week of scarlet fever the opsonic index for streptococci is lowered.

Woody of Philadelphia makes the following statement: "The simultaneous appearance of the exanthemata of measles and scarlet fever is one of the puzzles of fever hospital management", indicating that the Toronto findings are by no means a local condition.

In order to get evidence a little more tangible, I did intracutaneous tuberculin reactions on 40 cases of scarlet fever, 20 boys and 20 girls, none being under the age of five years. I chose the tuberculin reaction because it is specific and a large per cent. of individuals over five years old give this reaction normally. In this reaction two features are looked for, first the amount of induration of the skin around the point of injection, with special attention to the appearance of any suggestion of a vesicle. Second, the amount of redness. Of these 40 cases I found 7 with-

out any reaction. Of the 33 remaining 31 were without any induration, and in 30 the redness was below 5 mm. which in chest clinics is counted negligible. The only cases in which the reaction deserves comment are the 3, 2 of which had a slight induration, and the other had a redness over 5 mm. This last case I may say was the latest case in the series, being a 62-day case. Of the other cases which gave a slight induration one was the earliest case of the series, being a 3-day case, and the other the second latest, being a 57-day case. In brief, the summing up of the findings in 39 cases of scarlet fever for the tuberculin reactions 36 cases (between the 3rd and 57th day) had a negligible reaction where under ordinary circumstances 26 at least should have had a typical reaction.

In order to get a more comprehensive comparison I did a similar tuberculin reaction on a series of similar diphtheria patients, 38 in all. Of these there were only two cases which were entirely devoid of reaction. Of the remaining 36, 32 had induration, 8 of which had vesicular result. 10 showed redness beyond 10 m.m. and none showed an induration less than 4 mm. Of the 4 without induration 2 were children of the same family, which checks up to a certain extent the specificity of the test. I may also mention that 3 out of the 4 had had less than 40,000 units of antitoxin, a point which must not lead to any false conclusions for the percentage of cases showing induration was slightly higher than is usually found in chest clinics. Some cases where small doses of antitoxin had