

value owing to its sweating and other local action, but, in his experience, not in chronic cases of rheumatoid arthritis, and it is of very little use in rheumatism of the joints.

ARIEL TRANSMISSION OF TYPHOID FEVER

Investigations in this direction, says Germano (*Zeitschrift für Hygiene und Infektionskrankheiten*, 1897; *Presse médicale*, July 28, 1897,) have been made in the following manner: A certain quantity of typhoid cultures in bouillon or agar ~~were mixed~~ either with the dust taken from the sick room, with fine sand, with earth, or with the faecal matter of diarrhoea, all of these substances having been previously sterilized. Each mixture was then distributed in three Petri boxes, one of which was placed in a damp room; another was left air-tight on a table in the laboratory, and the third was also left on a table in the laboratory, but, in order to obtain more rapid desiccation, the mass was uniformly distributed on the walls of the box with a sterilized glass rod. At various intervals as much as would lodge on a platinum loop was taken from each receptacle and sown on a proper medium.

These experiments proved that, in the earth and the dust, under the influence of slow desiccation, as in the second box, or accelerated desiccation as in the third box, the typhoid bacillus ordinarily succumbed at the end of twenty-four hours, and that, occasionally only, it still gave cultures in bouillon after having been in the air-tight box for two or three days. In the faecal matter, under the same conditions of desiccation, the life of the typhoid bacillus was much longer; on agar no cultures were obtained at the end of six days, but in bouillon the cultures could still be made at the end of twenty-five days. This difference is attributed by the author to the fact that it is very difficult to dry the typhoid bacillus in faecal matter. He says that, in any case, if typhoid

fever is to be transmitted by the air, the desiccation of the bacilli in the faecal matter would have to be such that they would no longer be alive.

In another series of experiments the cultures were deposited on pieces of cloth and linen. In these conditions, in spite of the progressive desiccation in the boxes, the typhoid bacilli still preserved their vitality at the end of sixty days and sometimes even longer. The author explained this fact saying that the fibres of the tissues protected the bacilli against desiccation.

From all these experiments the author concludes that the doctrine of the transmission of typhoid fever by the air is scarcely admissible. In order that the air may carry particles to which the bacilli adhere, it is necessary that they should be found in a condition of desiccation which is scarcely compatible with the vitality of the bacillus. On the other hand, the danger of transmission by objects, such as clothing, woods, etc., soiled by the dejecta is very real.

TYPHOID FEVER

The Department of Health announces that typhoid fever is unusually prevalent in this city this fall. If the cases were no more numerous than appears from the weekly reports of that department, this announcement would not be justifiable, for reference to this report shows that beginning with the week ending September 4th and including that ending October 2d the cases reported were 9, 10, 16, 9, and 7, or 51 for five weeks. This is not a large number for a population of 1,600,000. But, unfortunately, these figures do not begin to represent the truth. If we turn to the portion of the report in which the deaths are recorded, we find that in these same weeks the deaths from typhoid fever were 1, 6, 8, 9, and 5, or 32 in all. In the week ending September 25th, 9 cases were reported, and there were 9 deaths. As is well-known, the death-rate in typhoid varies considerably. In 18,612 cases aggregated by Murchison, the mortality was