THE DANGERS OF INFECTION IN TUBERCULOSIS.

Thos. C. Craig, M.D., Surgeon U. S. Navy (Retired).

Tuberculosis is probably one of the most infectious diseases we have to deal with. So true is this that to prove this assertion it is only necessary to investigate the causes which lead to the development of the disease in many cases, that it is extremely dangerous to healthy persons to have a case of tuberculosis living in the same apartment with them needs no explanation. Several factors combined will almost invariably produce the disease; for example, a person with a low resistive power brought about by overwork, sickness, poor hygienic surroundings, deficient quality and quantity of food—place this individual in an apartment in which there is a case of pulmonary tuberculosis, or which has recently been occupied by a case of pulmonary tuberculosis, and the result is almost certain to be a development of this same disease. So much is the danger of infection understood that at many of the hotels at San Remo, one of the leading health resorts of Europe, the proprietors of these places disinfect the rooms, carpets and bedding each time that they are occupied by a tubercular person.

By carrying out similar routine disinfection, and putting into effect certain similar regulations in the Grand Duchy of Baden, the death-rate in this disease was reduced from 3.08 per 1,000 to 2.80 per 1,000, or no less than .28 per thousand; and this too when the means of disinfection were much less perfect than at present. Even if this same percentage of prevention could be carried out here in New York, the number of cases of tuberculosis would be greatly reduced.

We are all, no doubt, familiar with examples of cases of tuberculosis in families where they can all be traced to the infection of a single one. I am cognizant of the following interesting and instructive example of infection:

A member of a family of five persons contracted pulmonary tuberculosis. This person was unable to leave his bed; he was not over cleanly in his habits, and as a consequence he expectorated on the carpeted floor and on the wall alongside of his bed. In due course of time three other members of his family contracted this disease.

I know of another case where the wife had pulmonary tuberculosis; the husband contracted the disease from her. These were cases that could be traced to these local causes of infection.

In regard to acute general tuberculosis I can quote the case of a washerwoman who washed for a tubercular case. The handkerchiefs were soiled with expectoration. This washerwoman had a cut on one of her fingers, and through this wound she became infected with general tuberculosis.

One more case—a boy received a lacerated wound of the scrotum; through this acute general tuberculosis was developed.

The foci of infection in our cities are many; our dust-laden streets, public telephones, public vehicles, street cars, places of public amusement, stores, etc., are all areas of infection. Tuberculous persons occupying or visiting these places are not over careful as to where they expectorate; a mat or dark corner is generally chosen. There the sputum dries into dust, and in sweeping or dusting these particles float through the air and inhaled by the passer, and the result often is a case of pulmonary tuberculosis.

I believe that the trailing dresses of ladies often drag through tubercular sputa on the streets, and this infecting material is unconsciously brought into houses; it dries, and when the dress is cleaned with the broom or brush these infecting bacteria are showered all through the air of the room, there to be breathed in by the room occupants, and thus many cases of pulmonary tuberculosis occur.

I remember a visit I made to one of the hospitals in this city a year or more ago, and of my seeing cases of pulmonary tuberculosis, heart disease, rheumatism and malarial fever all together in the same ward.

Leprosy and tuberculosis are more nearly akin to one another than we are willing to believe. It is supposed that leprosy is not so infectious as tuberculosis, certainly there are far fewer cases of leprosy than of tuberculosis. We quarantine a case of leprosy, yet let a case of tuberculosis go where he pleases.

Among our well-to-do families, where hygienic rules and proper directions can be carried out, the dangers of infection are lessened but still not obviated. It is almost impossible to prevent a tubercular case from allowing some of his sputum to accidentally come in contact with the carpet, bedding, napkins or towels, and there drying into dust it becomes a certain source of infection to some one.

Among our poor families, where they only have two or three rooms, the well persons often have to live and sleep in the same room or bed with the tubercular person, and thus the dangers of infection are greatly increased.

These persons have not the means to guard against infection or they are indifferently careless as to their future health.

Another very important point is this: Many persons do not know of the dangers of infection in tuberculosis, but believe that the disease is hereditary. Tuberculosis is not a hereditary disease; it is an acquired disease, save possibly in some rarely exceptional cases. A recent writer on this subject has said "that congenital tuberculosis is at least a rare disease, and that it cannot account for more than a very small proportion of the alleged hereditary transmission of the disease."

A weakened resistive power may be transmitted to an offspring, but only extremely rarely the disease.

There are other common ways of infection in tuberculosis, or rather surrounding causes which conduce