

this tuberculous condition may remain latent and finally die out ; but in others small particles become dislocated from the glands, and getting into the general lymph stream, finally reach the blood, and so pass on to some part where conditions are favorable to setting up local disease.

Besides this road of infection by means of the lymph stream, there is another which of late years has been given a place of greater importance. You will remember that the tonsil is formed on the surface somewhat like the cortex of the brain, convolutions alternating with sulci or crypts. Covering the surface of the gland is a mucous membrane, formed of several layers of cells, and this mucous membrane dips down into the crypts, making in adults a complete external coat. But in children it is found that in places, deep down in the crypts, the mucous membrane becomes extremely thin and sometimes disappears. Owing to this loss of epithelium, the blood, with which the gland is very plentifully supplied, comes into almost actual contact with the contents of the crypts, so that germs could easily pass directly into the blood stream. Now it is reasonable to suppose that among the many bacteria that live deep down in the tonsillar crypts the tubercle bacilli may easily be present, and without leaving any indication of the avenue of infection, pass into the body fluids.

Besides the tonsil, open wounds offer an avenue of entrance directly into the vessels. If the bacilli are lying about on the instrument causing the wound, or on the skin of the surrounding surface, they might easily be drawn into the open vessels and carried away by the blood.

That germs do frequently get into the blood and set up tuberculosis, without any other focus of disease being present, is demonstrated by the investigations of Koeing, who found that in fourteen out of sixty-seven autopsies on subjects who had suffered from tuberculosis of bones or joints, no other lesions whatever could be found.

EARLY SYMPTOMS AND DIAGNOSIS. *

The frequency with which a mistaken diagnosis is made in cases of morbus coxæ is astonishing. Instead of getting the patients early in the disease, the majority of our cases have been suffering a year or more, during which time they have been treated for anything but tuberculosis. Case after case comes in with a history something like this :—

Johnnie fell on the ice a year ago and hurt his hip. Six weeks later he began to limp. He was treated for rheumatism for a month or so when it was decided that the pain about the hip and knee indicated sciatica. The local treatment for sciatica was then pursued for some time, until finally the gradual