

throwing an increased amount of blood into the central organs, and the body's equilibrium is interfered with. The pulse may be slow and full, on the one hand, or rapid and feeble, on the other, depending on the extent of the intoxication and its influence upon the muscular fibres of the heart and upon the nervous system. Frequently the heart is very excitable and patients have fainting spells. Sometimes, instead of the blood being retained in the central organs, it seems to remain in the extremities and causes a dilatation of the veins. Hemorrhoids are almost invariably present in those who suffer from auto-intoxication for a considerable time.

*The Respiratory System.*—The effects of auto-infection on the respiratory system are not so numerous as they are on the circulatory or nervous systems. Their effects are shown more quickly and in a more aggravated form when the intoxication is complicated with some lung trouble; and *vice versa*, all lung diseases become markedly worse when there is systematic intoxication, for there is deficient oxygenation of the blood. It would appear, from recent investigations, that the colon bacillus plays an active part in the causation of some forms of pneumonia and empyema, but more frequently when there is a lesion of the intestinal mucosa.

*The Skin.*—The skin shows the effect of the intoxication in its pale, muddy, unhealthy color, foul-smelling secretions, and in any one of the many skin diseases.

*The Nervous System.*—When there is auto-infection to any great degree it manifests itself in some of the many nervous phenomena that we see so frequently in our every-day practice. One of the most frequent manifestations is a feeling of drowsiness, due to the effects of the absorption of one of the intestinal gases, likely that of sulphuretted hydrogen, which is known to have a soporific effect. Though the patients feel drowsy, they are poor sleepers; they roll and toss about the bed; they are frequently awakened by horrible dreams, or find themselves wandering about their rooms. In the morning when they arise, they do not feel refreshed; but, on the contrary, they feel weak, nervous, exhausted, and find their clothing moist by a clammy, unhealthy perspiration.

I believe that a very large percentage of all headaches and neuralgias are due to auto-infection, it matters not where the pain is located. For I have many times witnessed the disappearance of the headache after the bowels have been completely emptied, without the assistance of a single dose of medicine.

As for the single germ of intestinal origin, the most frequent disturber in the neighboring and distant parts, the colon bacillus *communis* leads them all. This germ seems to be the king of disturbers and has been found in nearly all the organs of the body, and under circumstances that have led investigators to believe that it unquestionably has pyogenic properties. Many other germs, with known pathogenic properties, have been proven to be identical with this bacillus.

I shall not attempt to more than mention a few of the diseases in which the colon bacillus appears to be the most active agent. It has been known to manifest its presence in the following conditions:

1. Infectious diarrhoea.