

is pain after taking food, similar to that felt in ulceration of the stomach. Occasionally there is vomiting. These abdominal pains are very difficult to relieve; they seem to be of the same nature as the pains already referred to, as occurring in other parts of the body.

In several cases of this epidemic influenza, there has been slight jaundice, as indicated by yellow tinge of the conjunctiva and general surface. In most, if not all of these, there has been considerable fever and prostration. The following case, which I saw with Dr. Dobie, illustrates the most severe of these cases with jaundice. The patient was a young man. He had had a sharp attack of influenza; the temperature rising to over 104° with considerable delirium. After a day or two he improved, and was able to sit up. The next day he was feverish again, noisy delirium soon set in again, and jaundice began to develop. The temperature was variable but high, jaundice deepened, the conjunctiva being also markedly congested. He rapidly grew worse, became comatose, urine dribbled away unconsciously, staining the bed a deep yellowish brown. A marked purpuric rash came out, but there were no other hemorrhages. The bowels were moved by enemata, the motions being at first constipated, later bilious. Some mucus was vomited. Liver dulness was somewhat lessened. The pupils reacted to light. He died comatose within a week of the relapse. I saw another case with Dr. Frank Cowan, in the person of a young medical practitioner, in whom the jaundice was less deep, but the petechial rash was quite copious. He also died comatose within a few days. And I have just seen another case with Dr. R. B. Nevitt, bearing a striking resemblance to these two: what the result will be remains to be seen, but there is little probability of recovery, as the patient is already in a typhoid state, with very weak pulse. The urine is dark and contains a trace of albumen; the stools are pale, the tongue brown and dry, and there appears to be tenderness in all parts. Liver dulness is somewhat diminished, and splenic dulness reaches the margins of the ribs.

Doubtless the condition in all these cases is one of marked toxæmia. The jaundice may be due to destruction of red blood corpuscles, but

the reduction of the area of liver dulness indicates disease of the liver, and jaundice, as due in part at least to absorption of bile. In that case they resemble acute yellow atrophy of the liver, which occurs sometimes in fevers. The first case looks very much like one of yellow atrophy, except that the temperature rose to 107° before death, instead of being subnormal.

Generally speaking, in this epidemic, the prognosis is favorable. The general mortality has been high, but probably few deaths have been due to the influenza directly. This is due to the fact that the intensity of the fever was usually mild, and its duration short, and the vital organs were seldom more than slightly affected. A few however died, I believe, of heart failure, but perhaps the heart was previously affected. Pneumonia seems to have been unusually prevalent, but there can scarcely be any direct connection between it and influenza—the same germ would probably not cause both diseases. The heavy congestion of the lungs occurring in many cases doubtless rendered them more vulnerable to attack by the microbes of pneumonia.

Relapses, or second attacks, were fairly common. One gentleman had a marked attack of influenza, and then pneumonia as a sequel. He passed the crisis of that disease, when he was again attacked by influenza, in which he had a temperature of 103° . It had no effect, however, on the process of resolution in the lung—he seemed to recover quite as quickly from the pneumonia as if he had not had the second attack. None of the cases of second attacks which I have seen were due to want of care.

As to treatment, the scientific method would be to give some substance that would kill or *inhibit* the specific microbe—if there be such—that cause the disease, as quinine destroys the germs of intermittent fever. But we know neither the germ nor the agent that would destroy it; we have to content ourselves therefore with symptomatic treatment.

For the relief of the headache and the pains in the back and limbs, the newer analgesics are exceedingly useful. Phenacetine, which I used most frequently, given in 5 to 20 gr. doses, usually gave great satisfaction—in some cases it