

erythrocytes was probably due to dehydration through repeated vomiting. The increase in the leucocytes was shown by stained specimens to be entirely in the polymorphonuclear forms, with at least relative decrease of the other varieties; such a condition as one finds in septic processes generally. No myelocytes were found. On this day there developed swelling and purplish discoloration of the ankles and left wrist, with extensive subcutaneous ecchymoses on the left forearm. Death occurred during the afternoon.

*Autopsy.*—The autopsy by Dr. Wyatt Johnston showed extensive soft vegetations with a slit-like acute ulceration in the mitral valve. The aortic valve showed old shrinking and fleshy vegetations, which had a slightly gritty feel. The spleen and kidneys showed acute swelling and a few old infarcts. In the heart muscles were numerous small white necrotic spots, not suppurating. The bone marrow was abundant, but free from suppuration. Diplococci, staining by Gram's method, were found microscopically in small numbers on the vegetations. Cultures in serum from the vegetations, and from the organs, remained sterile.

The point of chief interest is the absence of any embolic phenomena, with the exception of the acute nephritis with hæmaturia which occurred in the earlier part of the illness. The diagnosis was based more on the phenomena of general sepsis, associated with dilatation of the heart and cardiac murmurs of varying intensity and distribution. It is impossible to make any definite statement about the original illness which was the cause of the infective endocarditis, but on the whole it seemed to me that influenza was at least to be thought of in view of the signs, subjective and objective, in the respiratory organs both before and on admission to the hospital. There was no clinical evidence of a prior endocardial lesion. Apart from free stimulation the treatment was purely symptomatic. The idea of using anti-streptococcus serum was entertained, but was abandoned in the absence of any definite evidence that the infection was a streptococcal one.

On the opposite page is shown the temperature chart for the first four days after admission to hospital. This septic character continued during the first ten days.