

written notes, and as many more which I have seen and examined but have not recorded on paper. Only a few cases, however, can be reported individually on account of space.

During the winter of 1900-1901 I examined candidates for the gymnasium of the city Young Men's Christian Association. The first evening ten candidates presented themselves, of which three showed disorders or abnormalities of the heart, illustrating some of the causes referred to above.

*Case I.*—A young man who had played hockey for six winters. Apex beat very pronounced; heart dulness to beyond nipple line. Pulse 60. No cause could be discovered for the enlargement of the heart except the excitement and strain attending the game of hockey.

*Case II.*—Had an attack of typhoid fever the preceding summer; did some hard bicycle riding soon after. The heart lifted a large area of the chest with each beat; dulness was increased, from 1 in. to right of mid-sternal line to nipple line; pulmonary second accentuated. Pulse 85 sitting, 110 standing. The typhoid fever and the hard bicycle riding probably both contributed to the production of his enlarged heart and frequent pulse.

*Case III.*—Aged 20; height 6 ft. 2 in.; pulse 72. Heart enlarged to nipple line. No cause could be elicited unless it was due to the weakness resulting from too rapid growth.

The following case from private practice seems to have resulted from over-exertion:

*Case IV.*—Married man, aged 30. Had not felt well since nine months before when he rode seventy miles in one day on a bicycle. He was not in proper training, as he had not ridden at all for a year previously. The fact that he smoked rather much may have had some bearing on the case also. His pulse on two examinations was found to be 100 and 120 per minute. Apex beat diffuse; heart dulness slightly enlarged. In two weeks his pulse came down to 72 and his apex beat and heart dulness became normal. The only treatment was abstinence from tobacco and a mixture containing ammonium bromide and digitalis.

The next case represents a more advanced stage of the so-called athletic heart.

*Case V.*—Man of 45, unmarried; first seen October 21st, 1900, in the evening. He was sitting up in bed with marked dyspnoea and complained of pain in the epigastrium; he had had similar attacks before but not so severe. He ascribed the present one to fatigue from walking too far during the day. He had been a heavy smoker till a month before when he had given it up; he had felt worse since. He had had rheumatic pains at times, but no definite attack of rheumatic fever. He