

taneously various articulations. Improvement proceeded tardily, and in a few days convalescence set in: the pulse 60 per minute. Yesterday (3rd May) the patient would, regardless of admonition, get out of bed a little before mid-day. He sat on a settee, and an hour after rising he fell suddenly into a state of collapse. Half-an-hour afterwards Dr. Wichman arrived; he found the pulse feeble, 40 per minute, the lips livid, a little cyanotic, some dyspnoea, but no pain. At first Dr. Wichman believed the collapse had resulted from an instantaneous and copious effusion into the pericardium, but he subsequently abandoned this opinion. At six p.m., there was nothing new, but the pulse was less frequent, 23 per minute. At ten the same night the pulse had gone down to 16, otherwise there was no change.

*Present state.*—I found the patient as follows:—The body stretched horizontally on the bed with the trunk a little elevated, the hands on the coverlet, the pulse only 8 per minute (being only half of that noted at 10 last night); it was rhythmical, that is, it gave one beat every 8 seconds. The face and the skin of the whole body, pallid, cool, and covered with a viscous sweat; the eyes limpid, the pupils of half size, promptly reacting to light; over the lips, a lightly cyanotic colour; the tongue and the lining of the mouth and pharynx, pale and anæmic; no dyspnoea, no sputa, no cough, and no pain in any part of the body; the respiration counted 24 to the minute; the mind was perfectly free. The patient, whether by his posture, or by his aspect and conversation, gave us the impression that he had no just conception of the gravity of his condition.

*Physical examination.*—From percussion of the region of the heart no abnormal dulness was perceived: the circumference of the heart, and its size, could without difficulty be ascertained on the thorax, just as if its position was quite normal. Percussion of the lungs, in like manner, gave no dulness, in consideration of which I was constrained to exclude from the diagnosis pleural effusion, pulmonic, and every other infiltration. Auscultation of the lungs gave, over all, the normal respiratory murmur, mingled only here and there with rales and ittle bubblings, as we are wont to meet with

them when the lungs are in a state of pronounced hyperæmia. Auscultation of the heart, on the contrary, gave phenomena rather strange. To the systolic and diastolic valvular tones, weak indeed, but clearly distinguishable, there followed immediately a clonic spasm of the heart, which manifested to the ear placed over it a fremitus, which persisted for five seconds, with equal force, exactly, and then ceased completely.

The convulsive contractions of the muscle of the heart followed each other with such rapidity that they could not be better compared than to the tremors of the hand in a man labouring under *delirium tremens*. To the sudden cessation of the cardiac spasm, there followed two seconds of absolute rest, then a normal contraction (one second), a cardiac spasm (five seconds), a pause, and so on, in series. I continued the auscultation fully 20 minutes, and never succeeded in detecting the least deviation from the precision and regularity of the above-mentioned series of phenomena as already stated, neither systolic nor diastolic murmur was perceived. Examination of the intestines gave a negative result, and so did that of the neck. With this closed the physical exploration.

But from all these marvellous phenomena, what conclusion? What pathological process could I construct, or imagine, from such facts? How, finally, could they be explained? I confess that at the outset I found myself perplexed; but presently I sought to disembarass myself by a process of exclusive reasoning: I would not admit disturbance of innervation, consequently this datum was unavailable. The sensorium was completely free.—I might say unusually clear, so that I had no right to admit that in this there was any alteration capable of producing disturbance in the functionality of the nerves. Along the peripheral course of the nerves, in the region of the neck, I found nothing which could support this supposition. The symptoms of our case did not square with fatty or relaxed heart. The result of the physical examination was too evidently opposed to this belief to give validity to other reasons. Besides, the symptoms of these two affections of the heart are by no means constant, but vary so much that the