





## HYSTERICAL SYNCOPE, HEMIANESTHESIA, RAPID RESPIRATION.<sup>1</sup>

BY CHARLES W. BURR, M.D.,

Clinical Professor of Nervous Diseases in the Medico-Chirurgical College.

THE history of the case we shall study to-day is as follows: P. F., American, housewife, aged 40 years. Family history is negative. The patient has never had any serious illness except scarlet fever and measles in childhood, until the onset of the present trouble. Her account of herself is given with a reticence, the reason for which you will better understand later. This much, however, is clear, that in August of this year she began to have pain in the throat which, though constant, was increased by swallowing. At times she has suffered from attacks of dyspnea, pain, and distress in the region of the heart, extending to the left shoulder, but never affecting the arm and not accompanied by fear of death. Occasionally there are slight vertiginous attacks caused only by a sudden change of posture. On August 7, while at a picnic, she suddenly fell unconscious, and remained so for more than an hour. Since then she has had twelve or thirteen similar attacks. We know nothing concerning her condition when in them. A few weeks ago the throat pain became so annoying that she consulted Dr. Cleveland. On examination he found a slightly prominent right tonsil, and on the anterior aspect of it a little sac filled with granulations, around which was an area of slight inflammation. This spot was exquisitely tender to touch, the pain extending throughout the side of the head and face, so that he applied a 10-per-cent. cocaine solution. In a few minutes, to his great surprise, she suddenly grew pale, sank unconscious in the chair, and breathing became very shallow. After a few minutes she rallied for a time, only to again become unconscious. She was slightly cyanosed about the lips. Respiration seemed to cease altogether. The heart was weak and fluttering and the pulse scarcely perceptible. The doctor, having no knowledge of the remarkable history you are about to hear, thought, of course, that it was an instance of extreme susceptibility to cocaine. The patient's condition was so alarming that stimulants were injected and artificial respiration kept up for some time. After several hours she recovered. A few days later Dr. Cleveland sent her to this clinic.

Examination reveals the following condition: A well-nourished, but flabby, apathetic, middle-aged woman. There is, as you see, complete analgesia of the right arm and leg. I may stick in a pin where

<sup>1</sup> A clinical lecture delivered at the Medico-Chirurgical Hospital, November, 1894.



I will and as deeply as I will without eliciting the slightest evidence of even discomfort. Pain sense on the right side of the face is diminished but not abolished. Touch is not felt at all on right arm and leg and scarcely on the right side of the face. Deep pressure is felt as a touch on arm and leg, but cannot be localized. It is noteworthy that the existence of these sensory symptoms was unknown to the patient until we examined her. Their reality is proven by the fact that soon after the first examination the nurse came upon her unawares and found her much interested in testing herself. It also is noteworthy that, though, as you have seen, a touch on the right hand is unfelt, yet if I tell her to lift a glass above her head she still holds it after the hand passes out of the field of vision. In organic anesthesia this would scarcely happen. On the contrary, so soon as the eyes were unable to keep watch upon the hand and give warning, if one may say so, to the patient how much muscular effort to put forth in order to retain the grasp, the muscles would relax a little and the glass fall. Notwithstanding the anesthesia, there are certain points on the right side of the face which are very painful on pressure. We will find them on the supra- and infra-orbital notches, over the pes anserinus, and on the great occipital nerve. Pressure on the abdomen, over the ovarian region, so called, results in nothing. There is no mammary pain and but little spinal tenderness. The grasp of the right hand is weak and all movements of the arm are very slow. If I ask her to hold the right arm extended it remains so for a moment, and then slowly and deliberately sinks to the side. Notice also that as the arm is moved a rather coarse and very irregular tremor develops in it, which increases as we talk about it, and has, on previous occasions, disappeared entirely when the mind was fixed upon something else. There is no true palsy of the arm nor any ataxia. Slow as all movements are, yet, notwithstanding the tremor, objects are picked up and the nose or ear touched perfectly at the first attempt, the eyes being either open or closed. Station is good. The gait is good, though, as she lies in bed, there is awkwardness and apparent weakness in the movements of the right leg. The knee-jerk and biceps-tendon jerk are normal on both sides. Ankle clonus is absent. There is no wasting or rigidity in the arm or leg.

She is now breathing forty-eight times to the minute, the respirations being regular but shallow and upper costal in type. Her breathing rate varies greatly, reaching sometimes as high as sixty, and then suddenly falling to normal. It changes many times in the day, and has never been accompanied since we have known her by dyspnea. Percussion and auscultation reveal no sign of lung-disease.

The pulse averages 80 per minute and varies little. The apex-beat is not visible and is scarcely palpable in the fifth interspace a little

to the right of the nipple line. The heart-sounds are faint but there is no murmur. The area of dulness is normal. In short, cardiac examination is entirely negative. The abdominal organs are normal. Albumin and sugar were absent in all of several specimens of urine examined. The specific gravity averaged 1020. Tube casts were absent.

At first the patient said nothing about any difficulty of vision, but after much examination,—and, I must confess, she has been studied more than good therapeutics would justify,—she began to complain of dimness of vision of the right eye. When, however, Dr. Fox attempted to take her color fields for me, she dropped unconscious on looking at the fixation point, and the examination was, of course, fruitless.

This tendency to attacks of unconsciousness, which is by far the most interesting element of the case, I have purposely left to be considered last. The first attack of which we have any accurate knowledge occurred during the probing of the tonsil. On my first examination, while pressing upon one of the tender points spoken of above, she suddenly grew pale, sank to the floor with a moan, grew slightly blue about the lips, and apparently—mind, I say apparently—ceased breathing altogether. At all events the abdomen and thorax were absolutely motionless. The radial pulse was scarcely palpable, and the heart-sound weak and irregular. In about a quarter of an hour she recovered suddenly and completely, except that she was dazed, mentally confused, in a sort of dream state for some time. I have repeated this experiment, but for obvious reasons do not desire to do so now. Once since in the hospital, she has had an attack of spontaneous unconsciousness.

She is markedly susceptible to hypnotism so far as the production of unconsciousness is concerned. When told to look at my finger, without any suggestion to sleep, unless, indeed, she has been hypnotized before without my knowledge, and hence knows what to expect, she will in a minute or less become unconscious without change in cardiac or lung function, except that the respiration-rate is reduced to normal or somewhat less. There is no cyanosis, or cataleptic rigidity. The reflexes remain normal except that the rather widely dilated pupils do not react to light. She is easily awakened by sharp pricking with a pin or calling to her, but resents being disturbed, and if left alone may sleep for hours. All attempts to make her subject to suggestion fail utterly, as they have failed in almost every case of hypnotism I have studied. Indeed, there is room for grave doubt as to the willessness of cases of alleged induced susceptibility to suggestion. The possibility of fraud is tremendous; the safeguards against it are few.

The appetite is good, bowels regular, and menstrual function normal.

With this long history of remarkable events and curious grouping

of symptoms, referable to many organs, the diagnosis is easily made. It is a case of hysteria. No single organic lesion, indeed, no combination of organic lesions, will explain the symptoms, and multiplicity of non-related symptoms always points towards hysteria. Never forget, however, what I have told you so often, that hysteria should never be hurriedly diagnosed, should never be diagnosed till all possibility of organic or non-hysterical functional disease is excluded. This is the more important since hysteria is so frequently superadded to an organic affection. Let us go over the case then step by step and carefully. First the syncopal attacks. One thinks first of the heart itself. But here we have no evidence of organic disease. There certainly is no affection of the valves, and fatty degeneration, though it may be extensive without causing symptoms, certainly is not characterized by syncope from pressure upon a tonsil or over the facial nerve. The patient's statement that she is subject to attacks of cardiac pain running to the left shoulder and accompanied by dyspnea and faintness recalls angina pectoris. But true angina is rare in women and dyspnea is absent. The attack is short, and, though arterial tension may be increased, the pulse-beat is apt to be uniform and regular. In the vasomotor angina of Nothnagel there is pallor and cyanosis, faintness, and even unconsciousness. Our patient's description does not agree with either of these, but bears rather the ear-marks of one of the forms of hysterical angina. The syncopal attacks seen by us are parallel to the convulsions produced so frequently by pressure over a hysterogenetic zone. That the cocaine had any causative relation to the first attack is extremely doubtful. Indeed, it is certain that some of the reported cases of supposed cocaine poisoning, after local applications to the throat, were in reality hysterical.

The respiration will repay a little study. It averages, as we have seen, 48, sometimes reaching 60, and is very variable. One would expect the pulse-rate to vary in the same way, but, curiously enough, it is remarkably stable. This lack of relation between pulse and respiration is characteristic of hysteria, while in organic disease respiratory increase is usually accompanied by cardiac overaction. Further, while the breathing is so shallow and entirely upper costal in type, there is no dyspnea. Lastly, the respiratory tracing is perfectly uniform and regular. The inspirations are all of equal depth. The line drawn through the apices of the tracing is parallel to the base line. All this is a strong disproof of fraud. At all events, in some experiments I made for Weir Mitchell several years ago, in which the subjects were told to mimic as closely as possible a case of hysterical rapid respiration shown to them, none were able to do so. In every case a series of shallow respirations was followed by one or more deep inspirations,

caused by the imperative need for air, and, consequently, the tracings were all very irregular. I am not prepared to say that by long practice one could not learn to do this thing. Finally, it is remarkable that in this case, as in so many others, the patient paid no attention to the abnormality of breathing until we spoke to her about it. I ought, perhaps, to warn you that you may have irregular breathing and dyspnea in hysteria.

The hysteric nature of the one-sided sensory defect and weakness is proven by the absence of any signs of organic brain-disease competent to produce them.











