

dullary cancerous growths. Dr. Hughlings Jackson thought Mr. Clarke's case a very rare one. In no instance had he seen palsy of the tongue, either on one side or on both sides, without palsies of other parts. Thus, in a case of syphilitic disease there was palsy of the left portio dura and eighth nerves, as well as of the left ninth nerve. In a case of a tumour of the medulla oblongata and pons Varolii, there was palsy of the fifth, sixth, seventh, and eighth nerves, as well as of the ninth, on the left side, and paralysis of the right arm and leg. He mentioned a case of a man who found out one morning that he was hoarse, and that his tongue was turned to one side "like a hook." There was palsy, with wasting, of the right side of the tongue, paresis of the right side of the palate, and palsy of the right vocal cord. As the man was past fifty years of age, as he had albuminuria, and as the symptoms came on in one night, the probability was that they were the result of a clot. In one case of sudden palsy of the tongue, palate, and orbicularis oris which he had seen, Dr. Lockhart Clarke discovered relics of effusion of blood in the medulla. Dr. Lockhart Clarke's researches, showing the close relation of the lingual and spinal accessory nuclei, gave the explanation of cases of lesions in the medulla producing palsies of the several factors concerned in articulation, deglutition, and voice. Dr. Hughlings Jackson had never seen wasting of the tongue from paralysis of the fifth nerve, although the temporal and masseter muscles wasted. Dr. William Ogle referred to a case related by Dr. Hyde Salter in his article on the tongue in the *Cyclopædia of Anatomy*, in which paralysis and atrophy of the tongue were produced by a wound of the neck injuring the hypoglossal nerve. He had often divided the hypoglossal nerve in animals, and had found that the tongue did not always deviate towards the side of the lesion; sometimes it was protruded straight, sometimes it was even turned a little to the opposite side. This last occurrence was difficult to explain; it might occur in cases of disease of brain, where the lesion was double; or possibly the observation might be made when the tongue was partially withdrawn after protrusion, and when, from a reversal of the muscular action, it would appear somewhat pushed to the other side. Section of the hypoglossal nerve caused the tongue to be as it were turned up, the paralyzed side being the higher. He asked if this had been noticed in disease. Dr. Hilton Fagge had seen a case of unilateral atrophy of the tongue in a boy aged 5½ years. A piece of the odontoid process was found sticking up through the dura mater. Mr. Thomas Smith thought the action of the genio-hyo-glossus muscle sufficient to draw the tongue over to the paralyzed side. This muscle protruded the organ; which, when outside the mouth, was moved by the stylo-glossus muscle; and this, or the lingualis, might draw the tongue towards the sound side. Mr. Henry Power said that the theory of the existence of trophic nerves was almost entirely based on observations of the effect of injury of the fifth nerve on the eye. He thought, however, that little if anything was known regarding trophic nerves. In Mr. Clarke's case, he thought the lesion was not connected with the fifth nerve, but with the hypoglossal. In the case of the eye, he believed that the increased liability to inflammation after injury of the fifth nerve arose from the organ being more exposed to injurious influences acting from without. Mr. Soelberg Wells referred to some experiments of Meissner, in which sloughing of the cornea did not occur after experiments on the fifth nerve unless the innermost fibres were divided.—*Brit. Med. Journ.*, Dec. 9, 1871.

19. *Hysteria*—Dr. Edw. J. Tilt gives (*Brit. Med. Journ.*, Dec. 16, 1871) the following as his views of hysteria: "I think it requires two factors for its production—1. A predisposing nervous state; 2. The stimulus of some determining cause.

"Of the predisposing cause, we may safely say that it must depend on that modification of the nervous system which makes the nervous system of woman more prone to emotion than her mate; otherwise, how is it that the disease is in the main feminine, and only met with in men whose nervous systems are built on the feminine type? We moreover know that, although a disease of every climate and social condition, hysteria is most frequent in women of the upper classes of the civilized races, in whom emotionalism is intensified,

at the expense of reason and self-control, by injudicious training in childhood, and the subsequent pampering that ill fits them for the trials of life. We can go no further than to say that this undue action of the brain is the predisposing cause of hysteria. It may be that, in severe cases, this predisposition may be so strong as to be of itself sufficient to bring on the disease. At all events, we know that there are various degrees of intensity in this predisposition, and that the slightest determining cause will make some women hysterical. In a family with which I am intimate there are ten healthy children, whose parents are not in the least nervous; but a paternal uncle is insane; two maternal uncles died of delirium tremens; one brother has been epileptic from childhood; and a sister died of meningitis. Out of these ten children, two little girls—one seven the other eight years old—burst into tears if they are looked at, if they are not placed as they like at table, and are not helped in their right turn. They pass rapidly from laughter to tears, which will flow for hours and very abundantly. They have sometimes globus hystericus. These symptoms have been repeatedly quelled by preparations of iron; but they occasionally return, and must be taken as evidences of the hysterical state, very likely to be followed by the worst manifestations of the disease on slight provocation.

“With regard to the determining causes of hysteria, I must first mention those that intensify all nervous affections—debilitating influences, like loss of blood, diseases, physical shocks, mental and emotional shocks, prolonged worry, and want of sleep. Neither should I omit the contagion of one hysterical nervous system on another predisposed to become so.

“Coming to the most important causes of hysteria—those originating in the viscera—I will first remark that, as with our mental acts, so with our emotions, they are conceived in the brain; and that old physiology and the poetry of all times have erred in placing the actual origin of our passions in our abdominal organs. Still universal consent shows how strongly they are acted on by emotion that, in fact, in the viscera are the reflex centres of emotion that stimulate the nervous system to emotional acts.

“If I have, therefore, been correct in ascribing hysteria to undue action of the brain as an organ of emotion, a potent cause of hysteria must be found in undue action of one or other of our viscera. It is, no doubt, wonderful that bodies shared by us with the lower animals should not only support the bodily structure, but, by their healthy action on the brain, give lucidity to the mind and warmth to the feelings, making genius more admirable and charity more godlike. This sounds like poetry, but becomes plain matter of fact when we remember how often anger has caused jaundice, and how frequently a host of distressing mental and emotional sensations are due to that state of liver and stomach derangement which we call biliousness, and which doubtless acts by deranging the functions of the neighbouring great ganglia. I have likewise seen repeated attacks of hysteria brought on by biliousness, and their recurrence prevented by such measures as are best calculated to prevent biliary derangement. Such cases are, however, very rare, when compared with those in which the determining cause of hysteria is an ovarian or uterine ailment. The statistics of Landouzy, Brierre de Boismont, and Dubois d’Amiens, as well as the recent assertions of Dr. Crichton Brown, show this to be the case; and those who deny it must bring forward similar masses of equally well-digested facts.

“What, then, are the diseases of the sexual system that cause hysteria? Not those in which the structure of the ovary and womb are almost destroyed—acutely, as in abscess of the ovary, slowly, as in ovarian tumours and uterine cancer—but, as a rule, the mildest forms of anæmic ovarian or uterine disease; showing that it is not the intensity of the disease that causes hysteria, but the fact of its coincidence with a nervous system prone to become hysterical. Thus, hysteria is most frequently caused by those limited ovarian lesions that I have described as subacute ovaritis, lesions depending on morbid ovulation, and that frequently pass unrecognized under the disguise of diseases of menstruation. Of uterine affections, it is chiefly the milder sort—that are mucous membranous deep—which cause hysteria; and sometimes, by applying nitrate of silver to an ulcerated cervix, we most unwittingly bring on an attack of hysteria, in

patients who presented no signs of its being likely to come on, and thus experimentally prove that the two complaints may stand in relation as cause and effect. On one occasion, I thus brought on an attack in a lady, who had never before had one.

"How is the brain, laden with emotion, to be brought into contact with the viscera, the reflex centres of our emotions? The late Dr. Todd thought that hysterical delirium and other hysterical phenomena might be explained by toxæmia resulting from retained menstrual blood; but hysterical phenomena frequently arise before there is any menstrual blood to be retained; and Dr. Handfield Jones agrees with me, that with hysteria, as with other neuroses, there is no blood-poisoning. The distance between the brain and the viscera, between mind and appetite, is bridged by the ganglionic nervous system, which unites the viscera by a federal bond of union, and places this federation in intimate connection with the cerebro-spinal system. When the ganglionic nerves transmit healthy impressions to the brain, they pass unnoticed; but a hysterical fit shows how differently nerves and ganglia act when visceræ action is more or less diseased.

"In many hysterical fits, after a period of incubation, in which the system seems to become more and more charged with excitement, the attack begins by pain in the womb and ovaries. Soon the hysterical aura passes to the epigastric ganglia, and, concentrating there, gives rise to the suffocation and distress characteristic of the disease. Ascending still higher, the hysterical aura reaches the cervical ganglia, producing the sense of strangulation; it then attacks the brain, deranging its functions in ways too numerous to be mentioned, and, at the same time, deranging more or less the functions of the spinal cord, according to the degree of tension of the hysterical aura. For a time pain will thus concentrate—sometimes in the brain, sometimes in the visceral ganglia—and the patient collapses into prostration when the system has been sufficiently relieved by convulsions and by critical discharges. It has been possible, in cases published by Romberg and Schulzenberger, to produce the succession of phenomena just described by simply pressing on the ovaries; and I have repeatedly brought on unconsciousness in a nervous patient of mine by pressing the left ovary."

20. *Spontaneous Hydrophobia*.—The following very interesting case of this was reported to the Belgian Academy of Medicine by M. GUILLERY. The subject of it was a vigorous man æt. 71, tailor, who had always had the best of health, was attacked on February 5, 1871, with pain in the head, neck, and temporal region, which he attributed to cold. He thought little of it until he found, in the evening, on placing his hands in water for the purpose of washing them, that he was seized with a violent and painful spasm of the throat, and a great repugnance to repeat the immersion. Feeling thirsty, he tried to drink some water, tea, and coffee, but at each attempt the spasm returned and prevented him. This state of things continuing, M. Guillery was called to him on the 7th, and found him quite calm, speaking of his malady more as a curiosity than as a suffering. He swallowed some meat without difficulty, but dared not appease his ardent thirst. Introducing fluid into the mouth without seeing it, by means of a tube, had also brought on the spasms. Persuaded to try, he managed by an immense effort to get down two teaspoonfuls of coffee, but declared that he preferred enduring the thirst to repeating the painful attempt. The mere sight of liquid brought on the spasms, accompanied by paroxysms of intense and prolonged fear. The liquid once removed, he conversed calmly upon his strange malady. His pain of the head had disappeared; there was no fever or acceleration of pulse, and his tongue was only whitish. On the 8th, the symptoms described were found persisting and aggravated, cruel suffering having been produced by attempting to wash the hands. The only thing the patient could take was a few morsels of bread dipped in wine, which had to be conveyed from behind, so that he should not see them. Mere looking at a glass of water produced a fearful spasm. An hour after he died, declaring that the attempt to do this had killed him. No post-mortem was performed. It is quite certain that he had not been bitten by any dog, and from this M. G. says we must admit that hydrophobia and the "rage" may exist independently of each other.