

HISTORY

OF A SINGULAR

NERVOUS OR PARALYTIC AFFECTION,

ATTENDED WITH

ANOMALOUS MORBID SENSATIONS.

COMMUNICATED BY

DR. MARCET, FOR. SEC. &c.

Read Dec. 18, 1810.

THE gentleman who is the subject of the following singular case is Dr. Vieusseux, an eminent Physician of Geneva, who studied Medicine in Edinburgh and London, about forty years ago, and again visited this country in the autumn of 1810. Whilst in London, he was induced to draw up and communicate to the Society the particulars of his own case, which he has since authorized the Council, through the foreign secretary, to publish in this volume.

A physician *, sixty-two years of age, of active habits of life, and addicted to no kind of intemperance, of a healthy though rather bilious constitution, and for many years past subject to slight rheumatic pains, which however had not interrupted his professional pursuits, was seized on the 29th of December, 1807, with a pain in the gum, just under the third double tooth, on the left side of the lower jaw. The pain continued severe during 24 hours, then the part swelled, and but little uneasiness remained ; but he could not eat any food that was at all hard, even though he did not chew it with the diseased tooth. He continued to go out as usual, though the weather was very cold.

On the fourth of January, 1808, he felt, whilst at dinner, rather an acute pain in eating a piece of meat ; this pain quickly subsided, but was followed by a general sensation of cold, which obliged him to rise from table to warm himself, though the room was heated by a stove. He soon returned, however, to finish his dinner. In the evening at six o'clock, whilst visiting a patient, he suddenly felt a slight pain in the swelled gum, and an extremely acute one in the internal angle of the left eye ; this pain lasted a few seconds, then ceased, but

* Dr. Vieusseux's stature is of middle size ; his neck is rather short, and his frame strong, though not corpulent. He is of a fair complexion, and of a sanguine habit.

returned in a short time with increased violence, and attended with the following symptoms: a peculiar and inexpressible perturbation in all his sensations; a giddiness which made him see objects reversed, and occasioned feelings similar to those produced by a ship violently agitated, such as sickness and vomiting. These were followed by intestinal evacuations, and by a complete loss of his voice, which rendered his speech almost unintelligible, though without affecting his power of articulation. He also experienced a considerable difficulty in swallowing liquids, when in small quantities, and a sensation of weakness throughout the left side, with a numbness in the hand and the leg. He was able to walk, however, supported by two persons, but dragging his left leg; and the motion of the fingers, though benumbed, continued free. In this state he was with some difficulty conveyed home in a chair. After being put to bed, he found himself free from pain, and observed that he could move all his limbs, although he continued to experience the same giddiness. His intellectual faculties however remained quite unimpaired, so that he could accurately observe the whole succession of symptoms. On examining himself he discovered, that the whole of his right side was so insensible, that he could be scratched or pricked, without experiencing any pain; and that this insensibility abruptly terminated at a line dividing the whole body in a vertical direction.

The pulse being neither full nor hard, and not exceeding 90, and the countenance being rather pale, the patient was not bled, but three leeches were applied to each temple, a blister to the back of the neck, and one to each leg ; and a julep with æther and tincture of amber were administered.

The night passed without accident ; the next morning he took some emetic tartar ; but the same difficulty that he had in swallowing, he seemed to experience in vomiting, and it was only by assuming a particular attitude, and turning himself on his left side, that he succeeded in vomiting, an operation which had the effect of considerably diminishing his giddiness.

In the course of the day, the diseased tooth was extracted, and about half a spoonful of black blood was discharged from the gum by that operation. The swelling did not immediately diminish, but it subsided in the course of a few days. The root of the tooth had lost its polish, apparently by the effect of the suppuration of the gum.

The third day a blister was applied to the head. On the same day he began to be effected with a violent hiccup, which lasted till the seventh day, and for which he desired to have leeches applied to the fundament, as he had seen this treatment succeed in removing that particular symptom, and

because it appeared to him that the continual irritation of the diaphragm might occasion congestions of blood, although such a state might not have prevailed in the first instance. He lost about 18 ounces of blood by the leeches, contrary to the advice of his medical friends, who had prescribed, or rather consented, to a much smaller evacuation. The effect of these evacuations was completely to cure the hiccup, which returned no more, and yet the patient was not weakened by this treatment. A number of antispasmodics had been previously tried without success.

The disorder went on afterwards for about three weeks, in the form of a bilious fever, that is, nausea, want of appetite, and foul tongue, with an aphthous state of its surface. The patient was put under the usual plan of gentle evacuating remedies. The appetite returned, and by slow degrees he regained his strength without any paralytic relapse, but without any diminution of the peculiar sensations which had taken place at the moment of the attack.

These symptoms, which constituted the singularity of the case, we shall describe such as they were at the beginning of April, which was about three months after the first attack.

Left side. The left half of the head was in-

sensible either to pricking or scratching; this insensibility prevailed over the left half of the forehead, of the nose, of the upper and under lip, of the chin and over the left ear. The eye on this side was partly shut, and the corner of the mouth slightly drawn downwards; the tongue, when put out, was turned rather to the left than the right side, but to a very trifling extent. The hand and fingers had a sensation of numbness, as after having struck a violent blow on a hard body, particularly the thumb and the first and middle fingers. In the whole of this side there was a sensation of weakness; the leg dragged a little in walking; but it had not the feeling of numbness of the hand; and indeed except the peculiar affection of the face just described, the whole of the left side of the body preserved its usual degree of sensibility.

Right side. The right side of the head possessed the same sensibility as before the attack. It had experienced at first a very slight degree of insensibility, but in the course of three or four days had returned to its natural state. With respect to the other parts of the body, if a line of division were drawn in a vertical direction from the lower part of the neck or upper part of the sternum, descending forwards all the way between the lower extremities, and rising backwards up to the nape of the neck,

every part of the body on the *right* side of that line was insensible either to scratching or pricking, and even to the pain that inflammation usually produces; for the vesication on the right leg, which lasted and suppurred much more than that on the other side, occasioned merely a sensation of heat, and no pain whatever; and even a boil or furuncle, which appeared after the blister, on the right leg, with a considerable swelling and redness, produced only a sense of heat and tension, though under other circumstances it would have proved very painful. A blistering plaster which had been applied to the pit of the stomach for the hiccup, gave pain only on the left side, and none whatever on the right. And in the same manner a gathering at the root of a nail of the right hand, (which arose from the patient having torn off the skin without being aware of it, and which occasioned the loss of the nail,) produced fever and strong pulsations in the affected part, but no sense of pain.

The sensations of heat and cold were in this (the right) side, totally different from what they naturally are. When the patient put his right arm out of bed, the air of the room felt extremely hot. One day when he was getting better, an attendant brought him an etherized julep, which he took with his right hand, and the bottle felt lukewarm; but on taking hold of it with the left hand, he found it cold, as it really was. A new-laid egg

having been brought to him for his dinner, on taking it with the right hand, he did not find it hot ; but with the left it actually burned him.

He then distinctly perceived that, to the right side, cold bodies appeared hot, and hot bodies appeared cold, or only lukewarm. This is to be understood of liquids and of polished bodies, as glass, stones or metals, or even wood with a polished surface. Thus on putting his right hand into cold water, it seemed lukewarm, and on putting it into boiling water it appeared so far from hot, that he would have kept it immersed without being sensible of its scalding him, had not a disagreeable sensation, different from that of burning, at length warned him to withdraw it.

But when he touched bodies that were not hard or polished, as the hand of another person, he could not judge of its degree of warmth, it appeared neither hot nor cold, and he was obliged to touch it with the left hand, in order to ascertain its temperature.

Nevertheless he had in no degree lost the sense of touch, and he could perfectly feel the pulse of a patient with his right hand, and judge of its frequency and of its strength ; but in order to know the heat of the skin, he was obliged to have recourse to his left hand. This depraved sensation

extended over all the right side ; and consequently on putting him into a cold bed, it appeared hot to the right side, and cold to the left. In getting into a hot bath, it felt hot to the left side, and neither hot nor cold to the right ; and in plunging into very cold water, which he did at a subsequent period, the water appeared almost warm to his right side, but very cold to the other.

He had often a sensation of cold water all over his face, especially when in the open air, which induced him to wipe himself as if he had been wet.

His sleep was good, and he generally rose in the morning with a clear head ; but in about an hour it became somewhat confused ; it was neither headache nor vertigo, but something approaching to the feeling experienced after looking steadfastly at the sun, or after drinking mineral waters which do not pass away, but affect the head. This state, however, generally went off after dinner, particularly after drinking wine, and though he was accustomed to sleep in the afternoon, he arose from this sleep with his head clear, and continued well all the rest of the day. He felt no uneasiness even in hot rooms at night : in a numerous assembly, indeed, it happened to him as to others, to feel his head somewhat affected ; but this went off of itself, even whilst remaining in the hot crowded room. His voice was very faint, so as to render his speech often unintelligible. There

was also some derangement in the functions of the œsophagus ; solid or liquid food passed with ease, but that of an intermediate consistence, as pudding, thick soup, or soaked bread, descended with considerable difficulty ; and frequently, particularly at night, the food returned into the mouth by a kind of rumination.

It would be tedious to relate all the remedies he took during thisi llness ; they were chiefly of the antispasmodic and tonic kind, such as bark, valerian, assa-fœtida, camphor, volatile tincture of guaiacum, compound spirit of lavender, various chalybeates, stimulating frictions, &c. &c. These remedies, which he used in considerable doses, and during a length of time, did not afford him any critical relief ; but yet whilst taking them, his health gradually improved.

He used electricity during three months in the form of sparks. This remedy having been resorted to on rather vague indications, and not appearing to afford any distinct relief, he interrupted it for a fortnight ; but he then felt weaker, and having returned to it, he found himself benefited by it. The sensations produced by the sparks were much less vivid on the right side than on the left.

The winter of 1808 was extremely severe ; and the snow remained on the ground till the end of

March, which prevented his going out on foot, and rendered even riding in a carriage difficult. It was not till he could go out in the air every day, that his general health sensibly improved.

In the middle of June 1808, he went to the baths of Aix, in Savoy, and took hydro-sulphurated *douches* at the temperature of 106° or 108° of Fahrenheit. He returned thither in September, and during the interval, that is to say, in July and August, he bathed in the *Arve*, a river formed by the melting of the snow on the summits of the Alps, the temperature of which is not above from 52° to 56°, even when the atmosphere is between 80° and 90°. Both times, previous to going to Aix, he took the precaution of applying leeches to the anus, in order to prevent the head from being affected by the heat and vapour of the water.

The hot *douches* and the cold bathing thus used alternately, appeared to have little effect on the immediate symptoms of the disease ; but the patient's strength and general health improved considerably, so much so that he had every appearance of health, and could act and walk as usual, but was unable to run.

From this time his health continued constantly to improve, and though the peculiar symptoms still remain, yet the digestive and muscular powers

being restored, the patient bears these with much less inconvenience, so much so indeed, that he scarcely perceives them when he is not directing his attention to the subject, and particularly during the latter part of the day.

He has continued to bathe in the river during all the hot and temperate season, and has discontinued it only in the winter; and even then, when the weather has been relaxing, he has used the cold bath at home, and has been always careful to wash his head with cold water. He has occasionally taken aloetic pills, and has found them useful.

In 1809, being still subject to the peculiar sensations in the head formerly described, especially about an hour after rising, it occurred to him that, as this symptom was nervous, if he could, previous to its coming on, excite by artificial means an analogous state, he might probably avoid the recurrence of the morning paroxysm. For this purpose he tried smoking, which he had never been accustomed to. He smoked about half a pipe, the effect of which was to produce the peculiar giddiness which usually takes place on smoking for the first time; at the same time a grateful warmth pervaded all his limbs on both sides. This state gradually subsided, and he actually got rid of his giddiness that day sooner than usual. He therefore continued to smoke almost every

morning, and has persevered in the practice to this day with apparent benefit. The affection of the head has been diminished, and the voice manifestly improved, from the very first trials.

It is now three years since this illness began, and the following is an exact description of the state in which the patient finds himself at present.

The insensibility of the *left side* of the face has gradually diminished ; it has ceased in the under lip, in the chin, in half of the cheek, and in the ear ; it remains in half of the nose and of the forehead, with a slight sense of tension and numbness ; the affection of the inner angle of the eye, and of the corner of the mouth, have entirely disappeared. There is still a slight sense of numbness in the three first fingers of the left hand, but scarcely worth noticing. When the patient is not so well as usual, it is in the left, and not in the right side, that he feels weakness.

The right side is as it was at first ; the insensibility and depraved sensation continue as before. There is constantly a sense of heat throughout that side, often as if by puffs, or as if hot cloths were suddenly applied to the parts. At first the patient thought that this portended some improvement, but he has found no effects to result from it either good or bad. Cold bodies still appear to him lukewarm ; it is not merely the absence of cold, but a positive sensation of warmth ; and hot

bodies feel almost cold, at least neither hot nor cold. This side appears to have more vital action than the left side; it perspires more easily; the ear on the right side secretes double or triple the quantity of wax that the other does; and in general there is in that side a greater sense of energy and vigour.

This side does not appear to be susceptible of pain. It has been already stated that the inflammation and suppuration occasioned by the blisters, by the boil, and by the whitlow, produced only a sensation of heat and tension, without any pain. It is the same with every kind of injury, whether by a blow, or by solution of continuity. A scratch on the little toe, followed by inflammation, swelling and suppuration, produced only a sense of heat and tension. The prick of a thorn in the bone of the leg, which bled a good deal, produced only the sensation of an obtuse body.

The patient continues to be occasionally afflicted with rheumatism, but the pain is felt only in the left side. In the right it occasions only a sensation of local weakness, attended with an undefinable feeling of heart and itching, but without pain. A lumbago, to which he is frequently subject all over the region of the sacrum, is painful only on the left side, though he is very sensible that it exists also on the right side. When the cramp seizes him in the calf of the right leg, the sensation produced is widely different from the acute pain which he

experiences when the left leg is affected by the same cause. He has no longer a sensation of cold water over his face. He walks with tolerable firmness, but would not be able to run. A slight tendency which he had to œdema, in both legs, but more particularly in the right, has entirely ceased, though the patient has lately taken a long journey in a post-chaise. The voice, though much improved, is still hoarse. The deglutition of bodies of soft consistence is not perfect. The peculiar sensations in the head return almost every morning, and generally continue throughout the day ; but in a much less degree than formerly, and they go off after eating, particularly after drinking wine. Sometimes it has appeared to him that the right side of the head was most affected : but this so indistinctly, that he cannot draw any positive inference from that remark. The cloudy atmosphere and damp weather of England, and perhaps the smoke of coal fires, appear to be unfavourable to the clearness of his head, though they have by no means impaired his powers of attention in reading, writing, and the pursuit of his usual studies. Seasons more decidedly hot or cold are those which agree with him best.

On reflecting on all the circumstances of the case, the following is the opinion which the patient has formed of his situation.

The principle appears to have been catarrhal, and to have originated in the diseased tooth. The

disease in many respects may be compared to a paralytic attack, but it differs from it, 1st, because the motion of the affected parts has always been free, notwithstanding their diminution of power, and depraved sensations ; 2dly, because there has been no paralytic affection of the tongue ; 3dly, because there has been no affection whatever either of the intellect or of the memory, and that the patient has never articulated one word for another ; 4thly, because there has been no inclination to depression of spirits or effusion of sensibility, such as commonly occur in this disease ; 5thly, because the complaint still exists, and that so slight a paralytic attack either would have been completely cured, by such a general amendment of health, or there would have been a relapse during the three years that the illness has lasted.

From all these considerations he is inclined to believe, that his disorder is only a peculiar nervous affection ; and that the brain was not originally affected as is the case in paralytic attacks. He well recollects having seen a patient labouring under hemiplegia, who retained his power of sensation in the palsied side, and not in the other ; but it was a complete case of hemiplegia, in which the brain was visibly affected, and which terminated in death.

In this case there seems to have existed, as it were, two distinct kinds of paralytic affections : one on the left side, the other on the right.

That of the left side bears the most resemblance to hemiplegia, and appears to have attacked the muscles. The face, on that side, had, from the beginning, a sensation of stiffness and tension which it still preserves, though to a smaller extent. Although the motion of the fingers is free, there is, however, either in bending or extending them, a sense of numbness, which is still perceptible in the three first fingers. In short, the patient has constantly a feeling of comparative weakness in the left side, and if he is threatened with hemiplegia, he thinks it is rather in that side than in the other.

The affection of the right side is merely cutaneous, and does not seem to extend to the muscles ; for there is no kind of numbness or stiffness in their functions. These differences, however, are not strictly confined to each side ; for the muscles on the right side participate in some degree in the insensibility which pervades the cutis ; as appears from the absence of pain when they are affected with spasm or rheumatic inflammation. This condition of the muscles appears to be limited to those that are superficial ; it does not extend, for instance, to the fibres of the intestines or bladder. On the left side, too, the paralytic affection of the forehead and neighbourhood of the eye, is not merely muscular ; since the eye and forehead on that side are insensible to the impression of ice. There is, no doubt, some muscular fibre palsied in the œsophagus, and in the larynx, as deglutition

is not perfectly free, and the voice is still hoarse. The patient does not attempt to explain the depraved sensations of the right side ; he is satisfied with relating the facts, and leaves it to more skilful anatomists to explain which are the nerves affected on either side.

He believes that the peculiar sensations of the head arise from a derangement of equilibrium in the distribution of the nervous influence ; since every circumstance which contributes to the improvement of his general health, tends to restore the natural state.

Thus he feels well at night when in bed, and in the morning after sleeping. He is worse after being up some time. He is better after his meals, particularly after having drank a moderate quantity of good wine. He feels well in a carriage ; it has the effect of carrying off the uneasiness of the head ; and owing to this circumstance he has suffered little from the fatigue of his journey. These uneasy sensations in the head which are produced by a hot or crowded room, subside after having remained in it some time ; and this atmosphere which incommodes others, ultimately does him rather good than harm. This circumstance seems to shew that there is no organic affection of the brain. But the patient is well aware, that although this state of the head may not arise from any local cause in the brain, yet the frequent recurrence of this symptom, might in the end pro-

duce a local congestion, which he ought to use every precaution to prevent.

These details may, perhaps, be deemed to have extended to too great a length ; but the case appeared to the narrator sufficiently singular to induce him to comply with the request of his friend Dr. Marcet, that it might be presented to this learned Society ; and he will be happy to satisfy the inquiries of any of the members present, who should wish for further information with regard to the facts he has related.

Postscript to the 3d Edition ; by Dr. Marcet, May, 1816.

Dr. Vieusseux continued nearly in the state above described till April 1813, when he was suddenly seized with great debility, especially in his left side (all the motions of which however remained free), with giddiness, and palsy of the mouth and tongue. He soon recovered from the paralytic affection ; but a great debility remained, and a sense of lassitude in his head, which was always greatly relieved by taking food. About this period, he had a severe ophthalmia in his left eye, which however occasioned no pain ; for the insensibility of that side, and all the peculiarities described in the case, continued to prevail to the last day of his life. In September 1814, he was suddenly seized with severe symptoms of fever, attended with extreme weakness, and with a sensation of heat in the brain, but without the least diminution of his intellectual powers, and without any change in the singular circumstances of his original disorder. On the 20th of the following month, he died in a state of complete exhaustion, after two days of a lethargic sleep. It is much to be regretted that his head was not opened. (*Extracted from the Bibliothèque Britannique, 1815.*)