THE
DUBLIN JOURNAL

OF
MEDICAL SCIENCE,

1 MAY, 1843.

PART I.
ORIGINAL COMMUNICATIONS.

ART. VII.—*Some Cases of painful Affections of the fifth Pair of Nerves, with Observations.* By JOHN HAMILTON, M.R.I.A.

CASE I.—*Painful subcutaneous Tubercle in the Temple, over the temporo-auricular Branch of the superior maxillary Nerve.*

CHARLES DALE, ætat. 25, a shoemaker, now salesman at Messrs. Scott and Shields', Castle-street, pale and delicate looking, but not thin, complains of the most distressing attacks of pain shooting from the temple all round the right side of the head up to the vertex, behind to the occiput, and before to the centre of the forehead; from the same spot proceed darts of pain like fire, to the right eye, with an appearance of red spots before the eye, and dimness of vision, and at the same time he gets deaf of the right ear, the eye becomes swollen, and there is such discoloration about it that he has often been asked if he had a black eye; the pain also engages the side of the face, but never the jaw or teeth. There is a general soreness of the whole scalp at that side; but he refers the origin of all his sufferings to the presence of a small tumour at that part of the temple from which the painful sensations

spring; and on examination I discovered in front of, and just above the helix of the ear, at the roots of the zygoma, where the temporal artery commences, a small tubercle about the size of a grain of shot; it was moveable, and evidently rather deeply situated, and after a little handling disappeared, as if it sunk into the substance of the parts beneath: after he had performed the action of mastication, it became again apparent. He was always sensible of a painful feeling in it, increased by pressure or by the action of the temporal muscles in eating. The shocks of pain commenced like the blow of a heavy stick at this particular spot, and at such times the tubercle used to become larger. He has suffered from the complaint for eleven or twelve years; it began with paroxysms of pain about once a month, sometimes oftener, sometimes with intervals of three months, increasing in violence, at length he got an epileptic fit, commencing with a gushing sensation (aura epileptica) from the site of the tubercle (of whose existence he was not then aware), with insensibility and convulsions; he had eighteen of these fits, the last well marked one about seven years ago. Turpentine, which he then took, subdued them, and has since kept them in check, but not entirely, as he had shocks afterwards as nearly like the fits as possible. But during the whole of this long period, he has never ceased to suffer from occasional attacks of pain, which latterly have increased both in severity and frequency; so much so, that a day now scarcely passes without a shock, and in the interval he is never free from a dull, heavy, stupifying pain in the right side of the head; he has also, very lately, had some attacks bordering on epilepsy, short intervals of insensibility, preceded by an aura from the tubercle. His general health is wretched; he is gloomy and desponding, and unable to work at his business; the least thing frightens him and makes him start; he suffers from palpitation of the heart, and nervous pains about the thorax, and rather severe neuralgia of the liver; he has taken much medicine without benefit, and after cupping from the back of the neck he was decidedly worse.

I advised the excision of the tubercle, as the only chance of relief. To this he readily assented. An incision was made over the tumour, and a small dark coloured tubercle became apparent, which was readily removed ; but after its removal pressure, on the sides of the place where it had been, gave rise to disagreeable sensations, similar to what he had felt when the tumour had been pressed. I therefore removed two little substances in these situations, which, afterwards examined with a magnifier, had the appearance of portions of nerve. The tubercle itself was round, of a brown colour, composed of a perfect cyst, containing a small, hard, calcareous substance of a chocolate colour ; the surface of the tubercle was quite clean, nothing like nervous substance attached to it.

Mr. Philip Crampton, of Stevens' Hospital, was kind enough to examine the composition of the brown calcareous matter for me, and found it to consist chiefly of carbonate of iron, with a little carbonate of lime.

For some days after the operation he was free from any of the former sensation, and his health improved in the most remarkable manner ; but about a fortnight after, the wound having been quite cicatrized, he came to me, and, much to my disappointment, said his old symptoms were returning ; that for some days he had had pain in the right side of the head, and yesterday the head symptoms were so severe that he had taken turpentine, having dreaded a fit. On examination, I found a small moveable tumour in the situation of the other ; I was puzzled whether this was a second tubercle or not. Cutting down on it, I could discover nothing definite ; there only appeared a little whitish condensed cellular tissue, which was painful on pressure : this I took as my guide, removing every part of the substance that produced the peculiar sensation on pressure. When I had done so, to some depth, I clearly distinguished a branch of a nerve crossing the bottom of the wound ; touching this with the blunt end of a probe, induced a peculiar uneasy feel, which made him exclaim that he was sure I was touching a nerve. I

now understood the second accession of painful symptoms to have been caused by the pressure of the cicatrix (formed after the first operation) on this nerve; the cicatrix occupying the situation of the tubercle, and producing the same mechanical effects. As there appeared to be some morbid sensibility of the sides of the incision, I touched them lightly with caustic kali, and dressed the wound from the bottom. Mr. Fleming was present at both operations. Three weeks after the wound had quite healed by granulation, and he had no pain or complaint of any kind, and his general health is now excellent, such as he never remembers it to have been before. It is eight months since the removal of the tubercle, and he is perfectly well.

This case is worthy of note in several respects :

1st. The long duration of the symptoms, without their cause having been discovered, offering a sad instance of the lengthened misery entailed on a patient by oversight in such cases.

2nd. From the position of the tubercle, the nerve affected by its presence was most probably the temporo-auricular, or temporalis superficialis of the superior maxillary branch of the fifth. This supposition is confirmed by the fact of the parts affected by pain having been chiefly those supplied by this nerve, or those freely anastomosing with it, as the occipital and portio-dura of the seventh. The reflex actions, induced by the irritation of the nerve, were remarkably violent, producing the epileptic fits; but what is very singular, these reflex actions were in a great measure controlled by turpentine, although the irritating mechanical cause still existed.

3rd. The composition of the tubercle itself, chiefly carbonate of iron; the structure of the subcutaneous tubercle having been generally described as "homogeneous, of a dirty white colour, without a trace of cavities or divisions, of a fibrous, fibro-cartilaginous, or cartilaginous consistence."* The young man denied the possibility of the introduction of any foreign body. I have

* Dupuytreyn—Leçons Orales.

only found one case which presents any analogy to it. Mr. Windsor, in the *Edinburgh Medical and Surgical Journal* for 1811, states, that he removed a tubercle from the forearm of a woman, and found it to consist of a cyst, containing numerous little grains, which gave the sensation of sandy or earthy bodies.

4th. Its situation. Subcutaneous tubercles are not very rare in the extremities or trunk, and are occasionally met with on the face. Of this last, I remember to have seen an instance on the inside of the right of the upper lip, from whence acute darts of pain shot to the right eyebrow, ear, and side of the nose. These ceased on the removal of the little tubercle after five years' suffering, numerous incisions having been made through it previously, and much constitutional treatment employed, without effect. But no author, as far as I have been able to find, has given a case of subcutaneous tubercle in the head. I am, therefore, happy to be able to add to that of Dale's, another case, which I attended with Sir P. Crampton, whom I assisted in the operation.

CASE II.—May 12, 1837. A lady, ætat. 25, for eight years had observed, at the left side of the head, about two inches above and a little behind the left ear, a small painful tumour, not larger than a shot and nearly as hard; it was quite moveable; from it pain darted, in various directions, to the ear, along the head to the eye, and down the side of the neck. She was very subject to nervous headach, and to very severe ear and face-ach, at which times the darts of pain from this little tumour were most acute. It was very painful on pressure, occasioning a sick feel, and was more painful for some time after. Sir P. Crampton cut through the tumour, and on looking at each side of the incision, a small white speck like a millet seed, was seen imbedded in the skin itself, and not moveable as it felt before the incision was made. A piece of lint was put in the cut.

For three or four days after she suffered a great deal of pain in and about the affected spot; she had severe nervous headach,

with intolerance of light and of sound, with langour and depression of spirits. On the second day the lint was taken out, and on the fourth day the wound was united. For four years after she never had any return of pain, nor did she ever suffer during that time from ear-ach, or nervous headach.

The next case, though of a different kind, is nearly allied to the foregoing, presenting an example of the extensive sympathetic derangement of the whole nerve, from the local irritation of one of its branches.

CASE III.—Catherine Dunfield, ætat. 25, had been under my care for strumous sore throat, and for a slight attack of superficial lupus on the forehead, marked by numerous small, very painful ulcers, eating quickly and deeply into the skin. I had also attended her frequently for sciatica, of an unusually painful character.

May 1, 1840.—She went to bed well, but awoke in the night with a most severe pain in the back of the head, and darting through the ears. It was most acute, and lasted till morning. I saw her a week after. During the intervening time she had had each night a paroxysm of the pain, which went off towards morning. She had a second paroxysm at three o'clock, P. M., and suffered from it at intervals during the day. The attacks were increasing in severity. She was nervous and low. Pulse, 76; tongue, slightly furred; no sickness of stomach; bowels, confined.

Purging, quinine, mercury to slight salivation, colchium, a small cupping at the back of the neck, and a blister to the occiput failed to relieve her; but on the contrary, she became much worse, particularly after the cupping, though only four ounces of blood had been removed. She had hitherto been up, but on the 11th I found her in bed, and she said that the night before she thought she would have gone distracted with the pain. The pain had also changed its situation, having extended to the vertex, right temple, cheek-bones and side of face, and the upper part

of the side of the neck ; in short, it engaged the temporo-facial, facial, and cervico-facial branches of the portio dura of the seventh pair of nerves.

All these parts were tender to the touch. I had asked her before whether there was any sore on any part of the head, and had been contented with her assurance that there was not. I now, however, made a careful examination, and found at the right side, about the upper and posterior part of the parietal bone, a small scabby crust ; when this was removed, there appeared a small lupoid ulcer, the size of a fourpenny, deep, undermined beneath the edges, the circumference tumid and tender. The true nature of the case now struck me ; the present ulcer had gone deep enough to affect the pericranium, and at first one of the posterior superior branches of the seventh nerve, and the branches of the occipital, by the free communication which exists between them ; that in a less irritable temperament, the effects of the ulcer might have been purely local, and confined to that part of the nerve engaged in the ulcer ; but in her nervous excitable constitution, the morbid irritation had extended to all the ramifications of the nerve. As it was obvious that the only treatment likely to afford relief, was that directed to the ulcer, I made a transverse incision through it down to the bone. That night she first got ease, freedom from pain, and sleep. She had no return of the pain, and soon got quite well.

The next case of neuralgia of the vidian, temporal, and dental branches of the superior maxillary, presents some features of interest.

CASE IV.—December, 1840. Ellen Whelan, ætat. 40, residing at 11, Stafford-street, married, and has had eight children ; usually healthy, but now appears pale and worn ; suffers dreadfully from pain in the left side of the face, beginning at the upper jaw, above the molars, and going up the side of the head and out through the ear, so acute as to make the tears run down the cheeks, and so sore to the touch that she could not bear a finger near it. Felt only now and then, and not acutely during

the day; it usually becomes severe at eleven o'clock at night, and keeps her awake until daybreak, walking about the room in great torture. She is a little deaf in the left ear, which she has been occasionally for some years; but she has only suffered from the pain in the face for the last four months. She had taken a great variety of medicines, applied three blisters, and had several teeth drawn without the least benefit.

Examining the left ear, I found it blocked up with wax, of extreme hardness. This I removed, not without some pain, and afterwards syringed the ear well. Immediately after this she fainted, and remained in a state more nearly resembling death than I had ever seen before, for half an hour.

After recovering from this, not only the deafness, but *all pain in the side of the head and ear, had disappeared*. The only thing to deal with was the painful affection of the dental branch of the superior maxillary. The night of the day on which I removed the hard wax she slept well, which she had not done for three weeks; the next night the pain in the jaw returned. As there appeared to be some gastric derangement, I put her on alternate doses of blue pills and purgatives; for a few days after which I gave her half a drachm of bark, and a scruple of carbonate of iron, three times a day, and at the end of a week she was quite well.

I have only met with one instance of acute inflammation of the fifth, and I have seen few cases where the suffering was more acute, or where energetic and prompt treatment was more loudly demanded; and had such not been used, I felt persuaded that the inflammation would have extended along the nerve to the brain, and the termination have been fatal.

CASE V.—Saturday, April 22, 1837. Mr. ——— took ill in Court, with rigor, pains and soreness in the bones, great prostration of strength, and pallor, with an unpleasant feel in the head, not exactly pain, and an occasional slight dart of pain in the right ear. About the middle of the day these symptoms were succeeded by fever, hot skin, flushed face, thirst; pulse, 132,

full, but soft, and easily compressible; tongue white at edges, dry and brownish down the centre. A slight increase in the pain in the ear, but nothing very decided. He passed a restless night, and the pain in the ear became more marked.

Sunday. He is now labouring under most intense pain in the ear, side of the face going up the temple, down the side of the jaw, and even to the teeth, with occasional darts, like electric shocks, so severe as to make the whole of that side of the body start, causing him to jump in the bed. The accompanying fever was high; pulse 120; tongue quite white; skin hot, but moist; thirst, and prostration of strength. The pain was a little mitigated by the application of leeches. Their application was repeated to the number of twenty; and he was put on pills of calomel and Dover's powder.

Monday. Was free from pain in the morning, and passed a tolerable night; it began to come on, however, at two o'clock, and increased greatly till three o'clock. It was again relieved by free leeching. The quantity of Dover's powder was increased in the calomel pills. After the leeching he fell asleep; at night he was free from pain; his pulse 80; tongue still quite white.

Tuesday. Passed a good night, and in the morning was free from pain; but towards the middle of the day it again appeared with severity and with starts; pulse 96; skin hot.

Wednesday. Mouth sore; pain only seldom, and then dull and faint. On the three following days no pain, and he appeared quite well, pulse 72, and slept without the powders; but on Saturday night he raved and talked to himself, and on being questioned, said there was somebody in the room annoying him; it was some little time before he spoke rationally.

Sunday. Pulse 88; occasional darts of pain; does not feel so well. In the evening the pulse rose to 96.

Monday. Occasional darts of pain, which became more severe towards the middle of the day; pulse 108;. Leeches and a blister were applied with complete relief.

Pulv. Dover, gr. x. h. s.

Tuesday. Slept well, free from pain; pulse 88; tongue looks better than it has yet done, the white having disappeared, and been replaced by yellow fur.

Wednesday. Well; pulse 80; tongue nearly quite clean. From that time he never has had the least pain in the face.

The effect of the free leeching and mercury in checking the progress of this acute case was very satisfactory. In the treatment of more chronic affections of the fifth nerve it has lately been recommended, much too exclusively I think, to combat the disease by what has been called rational constitutional treatment, directed to improve the gastric and hepatic derangements; which derangements it has been attempted to prove are the causes of the majority of what are called idiopathic cases of tic dolooureux. Were they really so, this treatment would fail much less frequently than it does. But those who see many examples of painful affections of the fifth or other nerves will allow that in the greater number of instances they cannot be traced to gastric derangement, and that in those cases where the stomach and liver offer much functional disturbance the removal of this does not always, or even generally, cure the neuralgia. In many cases, on the other hand, the gastric derangement, and the general disturbance of most of the organs in the system, follow the pain in the nerve, and in such cases the tongue frequently cleans under the use of opium. Often, however, treatment directed to improve the secretion of the liver and bowels, is the best preparation for tonics or narcotics, and lays the best foundation for a complete cure. Where I conceive this plan most suitable I generally give three or four grains of rhubarb and as many of blue pill at bed-time, with the sulphate of magnesia, sulphuric acid, and infusion of roses, the next morning, for three or four nights and mornings; after this the patient feels better generally, but the pain is usually but little affected. I now give a drachm of bark and a scruple of carbonate of iron, three times a day; and where the pain becomes more severe at night, two grains of the extract of hyosciamus and one of opium, at bed-

time, to be repeated in the middle of the night if necessary. This treatment very often succeeds, much more so than beginning with bark, quinine, or carbonate of iron, at once, without any regard to the state of the digestive organs. Local depletion, particularly in the florid, and blistering, are very useful; but in most chronic cases the abstraction of blood aggravates the pain. There are cases, however, in which it is only wasting time, and prolonging the patient's sufferings, not to begin at once with tonics and narcotics, which often effect a rapid and almost unexpected cure. In illustration of this I may give the two following cases.

CASE VI.—Mrs. ———, the lady who had the subcutaneous tubercle removed from the side of the head, and who never since had suffered from any nervous pain, sent for me suddenly, February 14, 1842. She had recovered from influenza, and two days before I saw her became affected with the most dreadful pain in the right side of the head, eyebrow, face, and in the site of the infra-orbital nerve, and along the teeth. It had come on each day at eleven o'clock, and made her wild with pain, forcing her to stamp about the room. It was four o'clock when I saw her, and the attack was then subsiding, but she appeared languid and ill: pulse quick; tongue slightly furred; bowels had been freely opened by the senna mixture, but with no relief, as this day the paroxysm had been more violent than before. A good deal of discharge from the nose. Knowing her habit to be very nervous, I ordered the following mixture, of which an ounce was to be taken whenever the pain come on:

℞. Mist. Camphor. ʒ iiii.

Syrup. Croci, ʒ ii.

Liquor. Hoffmann. ʒ i.

Gutt. Nigræ, gt. xii. Fiat mist.

The pain began in the evening, but, as she said herself, it was stopped, as if by a charm, by the mixture, and she passed a good night. Next day, after a violent fit of coughing, the pain came on, but was lulled by an ounce of the mixture. Twice

during the day it tried, as it were, to return, but was checked each time by the same means. The next day the same thing occurred, and the fourth day she was quite well.

CASE VII.—Mrs. P. came to me last November, complaining of agonizing pain in the right side of the face, in the situation of the supra and infra-orbital nerves, above the eye-tooth, along the lower jaw, and up the side of the head, which was, during a paroxysm, sore to the touch. The paroxysms were irregular, brought on when she got hot, or took a hot drink, and worse at night, which she spent walking about the room, or sitting up in bed. The heat of the fire induced the pain, but she felt relief from cold dry cloths applied to the face, or from cold air. She had the peculiar heavy dull look of those suffering from aggravated neuralgia. She was not thin. Five or six years ago she had metritis after her confinement, for which she was obliged to be very actively treated, by depletion and salivation; she never thoroughly recovered, but became affected with lightness of the head, stupor, &c., and finally, by the painful affection of the face, for this, among other treatment, she had had three teeth drawn, but without any relief. She had then applied to me, and she now came begging I would give her the same pill which had cured her at that time.

This pill was two grains of extract of hyosciamus and half a grain of opium. I ordered her three of the same; and six days after she came to say, that after the second pill the pain had gone, and had not since returned. Finding her labouring under weight and stupor in the head, and that her tongue was loaded, I put her on alterative doses of blue pill and rhubarb at night, with the sulphate of magnesia in the morning; and ordered her shower baths and an issue on the vertex. I have not seen her since.

The truth is, that no cases require such varied treatment as painful affections of the nerves of the face, and he is certainly the best practitioner who lays down no set rule, nor binds himself to any one particular treatment, but changes it according to

the case and the habits of his patient. Relapses are always to be looked for, and what cured in a former attack, may fail in this. Hyosciamus certainly still deserves all the praise bestowed on it by Fothergill; in numerous instances I have found it by far the best narcotic; it often answers extremely well exhibited at the same time with bark and carbonate of iron.

Ellen Whelan, the subject of the fourth observation, after having been entirely free from pain for two years, came to me in last December, suffering from her old complaint, violent pain in the left side of the face, with a sensation as if she had not the right feeling in the cheeks, headach, and a heavy, stupid feel, &c. The pain became very bad each evening at five o'clock, when she was obliged to go to bed, but the pain would force her soon to get up, and she passed the greater part of the night alternately walking about, and lying down, till, completely exhausted, she would fall asleep towards morning. She had been ill for near a fortnight. Bowels costive; tongue covered with yellow fur; pulse 88, rather full. I put her on the alterative doses of blue pill and rhubarb at night, and the sulphate of magnesia every morning for a few days, with some relief to the head, but none to the pain. Two grains of quinine and half a grain of opium (a combination which often succeeds in periodic neuralgia) were ordered to be taken each evening before the super-vention of the paroxysm, and to be repeated every third hour till relief followed. At first she got relief, but at last the pills lost their effect, and the pain returned as bad as before. I now determined to try the extract of hyosciamus in the form of what, on the continent, are called Meglin's Pills, viz.

Oxyd. Zinci.

Ext. Hyosciam.

— Valerian, āā ʒi. in pil. xx.

Two to be taken night and morning.

I gave at the same time half a drachm of bark and a scruple of carbonate of iron three times a day. The pills sickened her at

first, but after the first two the pain was decidedly easier, and on the fourth day she was quite well. It matters little which of the remedies used in this case has the merit of the cure, it is perhaps sufficient to know that in similar cases such a combination may succeed.

ART. VIII.—*Cases and Observations on the Dropsy following Scarlet Fever in Children.* By CATHCART LEES, M. B., Physician to the South Dublin Union, and to the Institution for Diseases of Children.

As there exists much difference among the profession in the present day, in regard to the essential nature of the anasarca which so frequently succeeds to scarlet fever, I think it may prove interesting to place on record some cases which have occurred in my practice in the South Union Workhouse.

Scarlatina was very prevalent among the children of the Institution in October, 1840, but assumed a remarkably mild character, the eruption being healthy, with very slight affection of the throat. Several children were brought to me in November with œdema of the face, and general anasarca, so as to assume almost the character of an epidemic; but out of thirty-six such cases, only two had been under treatment for scarlatina; but I presume that the other children must have also had the disease, though in so slight a form as not to have been reported sick, and therefore that the first stage of the disease had been allowed to run its course, uninterfered with.

As the number of cases which occurred have afforded me an opportunity of studying the disease satisfactorily, particularly with regard to its complication and the pathological state of the viscera, I have selected a few of the more important cases, which will serve to illustrate the principal features of the disease.

In consulting the various authors who have written on this