

CASES OF HERPES ZOSTER (SHINGLES).

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THE successful treatment adopted in two of the cases, especially the third, rather than any attempt to elucidate the pathology of so troublesome, and sometimes intensely painful affection as herpes zoster, or shingles, must be my excuse for offering them for publication. They may, however, serve as examples of the varieties of the disease, as regards pain and constitutional disturbance; there having been scarcely either in the first case, while in the third the pain was said to be of an agonising character.

CASE I. A. H., a healthy young lady, aged 5, living at Brixton, was seen by me in December 1849. There was a copious eruption of vesicles, in patches, of the usual appearance, extending from under the right mamma upwards and backwards to the spine. There was little or no pain; and she would scarcely have been aware of the circumstance had not another young lady, with whom she had lately been sleeping, been the subject of a similar eruption, but which had been attended with considerable pain in the side previous to its appearance.

Beyond a dose of aperient medicine, and a simple dressing, to prevent friction, nothing further was needed.

CASE II. In March 1850, I attended a young woman of dark complexion, married, living in Lombard Street, who was attacked with shingles on the inner side of the right thigh. There had been the ordinary heat and darting pain preceding and accompanying the eruption; and when I saw her, there was an irregular and elongated cluster of transparent vesicles a few inches above the knee. Purgatives and diaphoretics were prescribed, and saturnine lotion applied to the eruption. The pain, however, continued very severe; and soon some of the vesicles ruptured, coalesced, and began to scab. At the suggestion of a surgeon of great experience, who had previously seen benefit from the application, the eruption was dressed three times a day with ceratum calaminæ spread on lint. She soon experienced relief from this dressing, and continued its use until the scales and crusts had disappeared.

CASE III. Mrs. F., aged 40, residing at Kilburn, consulted me in September 1855. She is a fair and rather stout woman, of nervous temperament, married, but has never been pregnant. Catamenia regular, scanty. Says she is subject to erysipelas.

A day or two before I saw her, she had had sharp and deep seated pain in the left side of the chest. There were several irregular patches of transparent vesicles, some of them being as large as small pearls, and remarkably raised and glistening, on the breast, extending into the axilla, and obliquely across the scapula to the spine. The breast itself was hot, swollen, and heavy; and there was considerable redness of the skin surrounding the base of each cluster. She complained of the pain in the seat of the eruption as being agonising, and having entirely prevented her from sleeping for two or three nights. The pulse was about 80, and there was but little febrile disturbance. Bowels freely open. To take the fourth part of a mixture containing carbonates of magnesia and soda three times a day; and a pill, containing one grain of calomel and one of opium, at bedtime. The eruption to be dressed with an ointment composed of equal parts of ceratum calaminæ and ceratum cetacei night and morning.

The same night, about 12 a.m., she awoke with the most intense pain at the scrobiculus cordis, attended with retching. I found her with an anxious countenance, face and hands covered with a cold sweat, pulse rapid, and scarcely perceptible. She was in bed, writhing and moaning with the pain. Ether, ammonia, and brandy were freely given, and two pills, containing a grain of opium in each, before any was obtained. Fomentations, unusually hot, were found beneficial. On the following morning she vomited a quantity of fluid, but with it there was no undigested food. No new clusters of the eruption were discovered, but some of the old ones seemed to be extending. During the next two or three days the eruption continued exceedingly pain-

ful. Some of the vesicles were becoming opaque and confluent. As the ointment had failed to procure relief, she now tried hot fomentations, dredging the affected surface with flour, etc.; but these afforded only temporary ease. To keep linen rags, saturated with the following lotion, constantly applied:—

R Pulveris opii ʒi; oleum jecoris aselli ʒiv. M. Fiat lotio.

In the course of a few hours she obtained marked relief from this application, nor was there any return of the pain connected with the eruption, except in a trifling degree. She was now able to sleep well, and expressed herself as being quite another person. She continued to use the lotion for three or four days, while the vesicles dried, scabbed, and fell off. The swelling and uncomfortably heavy feeling in the breast gradually subsided. During this time she took liquor potassæ with mucilage in camphor mixture three times a-day; castor oil occasionally.

When the eruption had almost disappeared, she complained of great pain in the affected side, but it was of a more intermittent character, and differed, she stated, from the pain accompanying the eruption. For this she was ordered the following mixture:—

R Ferri amm. cit., ʒii; tincturæ valerianæ, tincturæ hyoscyami, aa ʒi; syrapi ʒss; aquæ destil. ʒv. M. Fiat mistura. Sumat quartam partem 4tis horis.

She took this mixture for several days, with considerable benefit, and at the end of a week she was advised to go into the country.

In the lotion employed in the last case I cannot think the cod-liver oil acted otherwise than as an emollient vehicle for the opium, and would recommend that olive oil should be substituted, as being free from the disagreeable odour of the former.

For the neuralgic pain remaining after the eruption has disappeared, iron, in some form, and probably in large doses, seems worthy of more extended trial, and it has the recommendation of Dr. Watson in its favour.

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ON THE FUNCTIONS OF THE CHORDA TYMPANI.

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EVERY case which throws light upon the functions of individual nerves is worth recording. The difficulties attending the investigation of such functions are familiar to every practical physiologist. At all times great, they are especially so when the nerve under examination, like some newly found comet, is only visible in a part of its course, the remainder being obscure, if not wholly unknown. Such a nerve is the chorda tympani.

On August 22nd, I was consulted by Miss W., aged 16 years, for discharges from the right external meatus. The right membrana tympani had been destroyed by strumous inflammation, and the bottom of the meatus was occupied by the large vascular granulations growing out of the tympanic cavity, to which the name of *false fungi* has been applied by some writers on aural surgery. These were repressed in the usual way by the application of astringent and caustic remedies; very small fragments of *potassa fusa* being occasionally employed to remove the more prominent vegetations. Under this treatment the case steadily improved. The granulations diminished, the discharge disappeared, the meatus externus became free, and the hearing improved.

On October 1st, finding one prominent granulation more intractable than the rest, I applied to it a small splinter of *potassa fusa* by means of a modification of Wilde's forceps. The application was rather more painful than usual, but nothing peculiar was observed to result, until an hour or

two afterwards, when the patient took a dose of quinine. She then found that the right half of the tongue had lost its gustatory power. Her next meal afforded further proof that whilst the left half of the organ retained its normal condition, all things tasted alike on the opposite side. The common or tactile sensibility was not impaired. She was conscious that objects rested upon the tongue, but the feeling was merely one of common and not of special sensation. This state of things endured for some days, though with a steady diminution in the functional disturbance; and by the 15th of October, the lost sense was entirely restored.

There is no room for doubt that the results just described arose from the contact of some of the deliquesced salt with some of the nerves connected with the tympanic cavity, which latter had become penetrable as a result of the previous treatment. The only nerves which the caustic could possibly reach would be those of Jacobson and the chorda tympani; and there can be no reasonable hesitation in concluding that the latter was the one whose functions had been temporarily suspended. The former could scarcely lead to such peculiar results, save through a reflex process of the most improbable kind; but the trunk of the latter, passing through the tympanic cavity on its way from Meckel's ganglion to join the lingual branch of the fifth pair, would be directly exposed to the action of the caustic; being only protected from its influence by the investing mucous membrane of the tympanum which is infected over this nerve.

I am satisfied that the functions of many parts of the nervous system which are still moot questions, will only be determined by the labours of the pathologist. The tortures of vivisections, like the rack and thumb-screw of the middle ages, elicit doubtful responses in most cases. Dumb animals cannot express what they feel, or they would astonish the operator, more than flatter or enlighten him, by their estimate of his proceedings. And as vivisection is not likely to be practised upon man, the dead subject is ordinarily the only oracle to be consulted in endeavouring to ascertain the pathological seat of deranging causes. But even in carefully recorded cases, how difficult it is to arrive at the truth; how impossible to demonstrate that any observed lesion is either the only existing one, or the cause of the previous nervous disturbances.

In the case I have just recorded, no such difficulties exist. The facts are free from complications. The results followed almost immediately after the caustic application was made; perhaps even at once, had any test been applied at the time to ascertain the fact.

We are then justified in concluding that the fibres of the chorda tympani, blending with those of the gustatory branch of the fifth pair, and thus reaching the tongue, exert a controlling power over the gustatory function. Is this control direct or indirect? Is the chorda tympani a special nerve of taste, or does it merely regulate the conditions necessary to the due fulfilment of the functions attributed to the lingual branch of the fifth pair? Remembering its origin from a ganglion of the sympathetic system, it is not easy to arrive at the former conclusion. At the same time, the opposite idea is beset with many, though perhaps not insuperable difficulties. But as yet we know too little of the true functions of the sympathetic system to justify any foregone conclusion respecting what one of its large branches can or cannot do. I will not enter upon this inviting subject, since the case I am anxious to record throws no special light upon it; it merely establishes, with unusual clearness and freedom from doubtful contingencies, a fact which has been previously noticed by some observers, and suggested as a possibility by others—viz., that the chorda tympani exercises a complete control over the gustatory function, and the independence of the latter of common sensation.

In the *London Medical Gazette* for October 25th, 1834, my friend Dr. Noble has recorded a case in which the sense of taste remained in the left half of the tongue, whilst the tactile sensibility was completely destroyed. In the same

journal for November 21st, 1835, Dr. Noble records a second case, in which precisely the opposite conditions obtained; where the sense of taste was entirely destroyed on the left half of the tongue, whilst its common feeling was not very notably diminished.

In both these communications, the author urges the necessity for admitting the existence of some nerve fulfilling the gustatory function, apart from that which is the instrument of common sensation. In the first of these communications, and with especial reference to the question before us, he asks, "What is the function of the nerve from Meckel's ganglion called chorda tympani?" The number of the same journal for May 21st, 1836, contains a short account, extracted from the *Gazette des Hôpitaux*, recording a case in which the lost sense of taste had been restored by the agency of electricity, one of the wires being applied over the chorda tympani by M. Magendie. In the two former cases, there was no evidence that the nerve in question was really involved. The probability of a connexion between it and the gustatory function being merely advanced by Dr. Noble as an ingenious suggestion. Magendie's case, though somewhat more demonstrative, is still indefinite; for who shall trace the course which galvanic currents, transmitted through the external ear, would pursue, or the nerves which would come under their influence? Nevertheless, all these cases are interesting, showing that in different quarters attention has been directed to the probability of an existing connexion between the chorda tympani and the sense of taste. The additional instance which I have now recorded leaves no room for doubting the fact, though the *modus operandi*, and the exact relations subsisting between the chorda tympani and the trigeminal and glosso-pharyngeal nerves still remain to be ascertained.

Manchester, Nov. 2nd, 1855.

BIBLIOGRAPHICAL NOTICES.

STATISTICS AND TREATMENT OF TYPHUS AND TYPHOID FEVER, from Twelve Years' Experience gained at the Seraphim Hospital in Stockholm (1840-1852). By MAGNUS HUSS, M.D., Professor in the Medical Clinic at the Caroline Institute, etc. Translated from the Swedish Original, by ERNST ABERG, M.D. pp. 200. London: 1855.

DR. HUSS's statistics are founded on the observation of 3,186 cases of typhus and typhoid fever, admitted, during the years 1840 to 1851 inclusive, into the Seraphim Hospital, under the care of his colleague Dr. Malmsten and himself. In his preface, and in various parts of the work, Dr. Huss is anxious to be absolved from the charge of supposing that his observations on fever in Sweden are applicable without restriction to what is observed in other regions. There is no doubt much of truth in the subjoined remark:—

"The results from other countries may, for many reasons, differ from those I have obtained, although neither my observations, nor those of others, are incorrectly made. Notwithstanding the chief characters of the diseases are the same in all countries of Europe, the same disease may be modified in many ways in different localities; certain symptoms may be more evident and frequent in some places than in others; and a certain mode of treatment may give, in one locality, results altogether dissimilar to those in another." (Preface, p. v.)

In his first chapter, which is introductory, the author discusses the question which has in late years occupied much of the attention of pathologists—the identity or non-identity between typhus and typhoid fever. Fully granting that the circumstances under which Jenner, Louis, and their followers, have observed fever, have been such as to lead them to infer that the typhus and typhoid forms are essentially distinct, he has been led, by his experience, to come to a totally opposite conclusion. Here are some of the facts on which he founds his opinion:—