

For these I may say, in one word, that, having employed all the mechanical methods of dealing with them that rest on sufficiently sound principles or on sufficiently good authority to merit trial, I know of none that has afforded me such good results, both in regard of the immediate object and of the enduring result, as the method I have endeavoured to delineate in this paper.

I could easily append, as illustrations of these remarks, numerous histories of patients so treated both in private and as hospital patients were it desirable, but it appears to me to be unnecessary.

I have applied this proceeding only for the most intractable cases which have come under my notice, having preferred always to employ ordinary dilatation (usually by tying in the gum catheter) when it was possible to accomplish my object by that safe and simple process.

Wimpole-street, June, 1866.

APHASIA, WITH RIGHT HEMIPLEGIA.

LESION IN THE ISLAND OF REIL EXTENDING INTO THE EXTERNAL FRONTAL CONVOLUTION.

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THE following case deserves a brief record, as bearing upon recent views of the cerebral lesion in aphasia.

R. S—, a female, aged fifty, was admitted into the Royal Infirmary, Ward No. 15, on August 23rd, 1865, affected with right hemiplegia and loss of speech. She remained in hospital under observation until her death on April 17th, 1866. She had been taken ill suddenly three days before admission; while engaged in washing and ironing she fell down, and was found speechless and palsied. On admission there was complete paralysis of motion in the right arm, which was flaccid at this time, but after some months became rigid in the flexed position. The sensibility was not affected, so far as a careful examination could make out. After the rigid flexion of the arm came on, any attempt at extension produced signs of great pain. The paralysis and rigidity of the arm remained till death. The motor paralysis of the leg was nearly complete on admission; the sensibility not sensibly impaired. Subsequently (Nov. 6th) the leg was “drawn up, and the hamstring muscles were tense” (rigid flexion). This rigidity, however, passed off, and the voluntary motor power in the leg was in a great measure restored. The facial paralysis on the right side was well marked at the first; the features were drawn to the left side; the cheek (buccinator) was flaccid. In her attempts to speak she moved only the left side of the mouth; the right frontalis muscle was affected, the brow being smooth on that side, while it was wrinkled, and moved voluntarily on the other side. There was some imperfection in the voluntary closure of the right eyelid, but the winking movements were performed naturally. The facial paralysis gradually diminished, and on Dec. 11th had disappeared. No paralysis of the muscles of the jaw could at any time be detected. The tongue, when protruded, was straight, and could be moved freely in all directions. She could masticate and swallow quite well. No paralysis of the muscles of vocalization or respiration, nor of the muscles of the neck or trunk of the body.

Notwithstanding the immunity from paralysis of the muscles of the jaws, tongue, larynx, &c., the patient was completely speechless. The report on admission, taken by the resident physician, Dr. James Carmichael, now of Burntisland, thus describes her state: “Her speech is altogether inarticulate. She makes frequent and anxious attempts to speak, but the result is only a mumbling; no single word, not even ‘yes’ or ‘no,’ can be made out. She seems much disappointed at this failure, and often weeps and whines apparently from this cause.” At first her intelligence seemed affected, as she did not do what she was desired—e. g., put out the tongue; but it soon appeared from her general behaviour that her intelligence was not materially diminished. “She recognised persons readily, even though she had not seen them for some time, and she endeavoured to express her feelings by signs and gestures,” as well as by her mumbling attempts at speech. On trying to write

she made nothing but irregular scratches on the paper. It is curious that although she could not utter a single word, she could make herself understood by her husband, and the ward-nurse tells us that one evening they actually quarreled! From the completeness of the loss of speech, it was impossible accurately to test her memory or her mental faculties; but her eye looked bright and intelligent, and the impression, after careful observation, was that, though it had received a shock, her mind retained its essential powers of thinking, feeling, and willing.

Her appetite and digestive functions being good, and her other functions normal, she lingered on bed-ridden, and presenting little change except those already noted in describing the paralysis. The aphasia was complete from beginning to end. Bed-sores formed, and healed up repeatedly. Finally she died exhausted, as stated, on April 17th, the more immediate cause of death being pneumonia, which came on insidiously, without marked symptoms.

The autopsy was performed on April 19th, the weather being cold. With the exception of pneumonia in the third stage, in the middle region of the left lung posteriorly, no lesion of importance was discovered in the thorax or abdomen. On removing the skull-cap, some opalescent subarachnoid effusion was noticed. The brain appeared rather small; it weighed two pounds five ounces and a half. The sulci were deep and well marked; the brain-substance was moist and cedematous. No lesion in the right hemisphere, pons, or medulla oblongata. On slicing the left hemisphere horizontally, beginning at the upper surface, two small softened portions, of irregular shape, about three-quarters of an inch in diameter, were observed in the white matter, half an inch above the level of the upper wall of the lateral ventricle. One of these softenings was situated close to the longitudinal fissure, without involving its grey matter, and about an inch and a half from the posterior margin of the hemisphere. The other softening was placed near the external margin of the anterior lobe, about two inches from the front of the hemisphere, and not affecting the grey matter of the sulci. These softenings were not above one line in depth, and did not extend to the roof of the ventricle. In the white substance behind the posterior cornu there was also an irregular softening, of the size of an almond, separated by a thin layer of healthy white substance from the cavity of the ventricle.

But the principal lesion was found in the base of the brain, consisting of a softening of the external and anterior portion of the left island of Reil, which extended for a short way into the inferior surface of the adjoining external or inferior frontal convolution, and also penetrated in depth to the outer part of the corpus striatum, which likewise exhibited a small softening at the posterior part of its grey matter. These important lesions were carefully examined, in conjunction with Wm. Turner, M.B., demonstrator of anatomy in the University of Edinburgh, who reported as follows:—

“When the tip of the left temporo-sphenoidal lobe is raised, an alteration in the normal appearance of the island of Reil is seen in its antero-external part. Instead of bulging in a well-defined convex manner, it presents a deep sinking or excavation in the seat of its two most anterior and external gyri; and the surfaces of these gyri have in part lost their normal grey appearance, presenting a distinctly yellow hue. The yellow discoloration extends from the surface of these gyri of the island outwards along the bottom of the groove which separates them from the inferior frontal gyrus, and is continued for about half an inch outwards and three quarters of an inch from behind forwards along the under surface of that convolution. It does not extend to the outer surface. The depressed and discoloured portions of the island, as well as the affected part of the frontal gyrus, feel soft and fluctuating to the touch. There is no erosion nor solution of continuity on the surface of the affected convolution, which remains quite smooth. Owing to the destruction of the convolutions of the island of Reil, already described, a much larger portion of the under surface of the inferior frontal gyrus is exposed, when the temporo-sphenoidal lobe is drawn on one side, than is normal. After the brain had been immersed in spirit for some hours, the characteristic yellow appearance already described was still preserved.

“On a section being carefully made from the island inwards towards the corpus striatum, the softening, which presented an eroded and pultaceous appearance, was found to have penetrated into the anterior, outer, and inferior part of the corpus striatum. On horizontal section, a second small isolated softening was found at the posterior part of the corpus striatum. In the softened portions, the nerve-structures were destroyed, and replaced by free granules and granular cells.”

No other nervous lesion was found. The olivary bodies were normal. The spinal cord was not examined. The arte-

ries at the base of the brain were much diseased: the basilar was dilated, and presented calcareous deposits; the right middle cerebral was atheromatous, the left atheromatous and contracted in calibre.

The dissection in this case partly agrees and partly differs from M. Broca's views, which localise the lesion of aphasia in the posterior part of the inferior left frontal convolution. This convolution was over a small space distinctly softened and diseased; but, on the other hand, the chief lesion was undoubtedly seated in the gyri of the island of Reil; and when it is considered that the speech was not merely impaired, but entirely lost, the question is suggested, whether, supposing that there is a distinct localisation of the lesion in aphasia, the island of Reil may not be the spot. The island is a well-defined lobule of the brain—it is even named the central lobe by recent authors, from being the centre round which the principal convolutions of the cerebrum are arranged. The whole question of localisation, however, is still open.

In addition to the case now recorded, I have, since the case of aphasia presenting Broca's lesion, which was published in the *Edinburgh Medical Journal* in March last (p. 811), been obligingly asked by my medical friends to see five cases of aphasia (two under Dr. James Struthers, of Leith, one under Benjamin Bell, Esq., F.R.C.S.E., and two under Dr. M'Gregor, of Tranent); and I have received particulars of other three cases. In all of these eight the aphasia was associated with hemiplegia, and always of the right side of the body. Indeed, the conjunction of aphasia with *right* hemiplegia, and not with left, first pointed out by Dax, re-discovered by Broca, and clearly evinced in the remarkable collection of cases published by Dr. Hughlings Jackson in his excellent paper in the "*London Hospital Reports*" (vol. i. 1864), in which this subject was first prominently brought before the profession in this country, becomes more completely established the more the disease is studied. Exceptional cases will doubtless occur; it will be of immense consequence that they be accurately observed and described.

Edinburgh, May, 1866.

P.S.—Since writing the above, I have found in Dr. Hughlings Jackson's paper, published in the April number of the *Oph-*

thalmic Review, which he politely sent me (at p. 50, top), notice of three cases of aphasia and right hemiplegia in which the lesion extended to and involved the island of Reil. I would also refer to Dr. J. W. Ogle's collection of cases, especially Nos. 179, 215, 248, and 257, in the *Medico-Chirurgical Review* for 1865.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

KING'S COLLEGE HOSPITAL.

THE NATURAL COURSE OF TYPHUS.

(Cases under the care of Dr. GARROD.)

A PECULIAR interest attaches to cases like the following, which are examples of typhus as it takes its course uninfluenced by what is commonly called "treatment"—i. e., the exhibition of drugs or stimulants. In each case the temperature was carefully observed each night and morning by Mr. Charles Kelly, the house-physician, who has been kind enough to give us the notes and charts which are subjoined. In neither case was any stimulant or active drug prescribed. Our readers have thus the opportunity of observing the characteristic progress of typhus from the eighth or ninth day until its termination in recovery. The charts may be

CASE 1.

