Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

BIRMINGHAM GENERAL HOSPITAL.

ENCEPHALOMA OF THE CEREBRUM.

Under the care of JAMES RUSSELL, M.D.

THE following case presents some points of considerable interest. We may remark how strikingly the cancerous nature of the tumour, characterised as such tumours are by quick increase, answered to the very rapid progress manifested by the principal symptoms, and especially by the blindness. Although the history does not afford us means of judging when the earliest symptoms made their appearance, there can be no question that the pain had only been severe for ten weeks, and that the patient lost his sight almost entirely in the course of two weeks. It may also be noted, that the symptoms attained their full severity at once, probably from the tumour having reached the organs situated at the base of the brain before it induced any great disturbance.

The symptoms were typical of a tumour within the skull, and there was much to lead us to refer its situation to the cerebellum. The pain affected the occipital region; and, although it extended also to the forehead and temples, such a position of the pain is also met with in cerebellar disease. In a case of my own (*Medical Times and Gazette*, vol. i, 1863, p. 534), of tumour in the middle lobe of the cerebellum, the pain was seated in the temples. Again, loss of vision is known to be of no infrequent occurrence in connexion with tumours in the cerebellum. Vertigo was also mentioned by the patient, and probably loss of the faculty of balancing the body.

The pain was paroxysmal; it was also distinguished by its great intensity. Severity is sometimes a striking quality of the pain attending tumour of the brain; the pain not infrequently amounts to agony. In the present instance, the size and density of the tumour would give it the power of producing pain by pressure alone; and the remarkable posture instinctively assumed by the patient seemed to intimate that he derived relief from throwing the weight of the tumour off the nerves at the base of the brain. In other cases, however, as in my own case quoted above, the smaller size and less dense nature of the tumour negative the supposition that its weight can have much share in producing the pain, which, therefore, must be referred to stretching of the cerebral fibres, rendered preternaturally sensitive by protracted irritation.

The blindness also deserves attention. As is well known, this is a symptom not infrequent in cases of tumour of the brain, especially when seated in the cerebellum. In the present case, its cause is very satisfactorily furnished; and I would especially note the peculiar disposition of the parts at the base of the brain, which rendered a tumour in one hemisphere, not transgressing the middle line, capable of producing blindness in both eyes. This symmetrical affection of the eyes was one of the chief circumstances which led me to refer the disease to the cerebellum.

I may refer to a very similar case under the care of Dr. Wilks (*Medical Times and Gazette*, vol. i, 1863, p. 535), in which a tumour of the posterior lobe of one hemisphere of the brain caused blindness by pressing upon "the parts about the origin of the optic tracts". In this case, however, the tumour projected beyond the middle line, and the pressure was direct on both sides.

In many instances, however, we do not obtain the mechanical explanation of the blindness afforded by the present case, the optic tract and quadrigeminal bodies being found quite out of reach of the tumour; not to mention other cases in which blindness occurs in connexion with disease seated exclusively in the spinal cord. In such cases, other explanations, connected with the state of the blood-vessels of the optic organs, or with some more obscure cause affecting the nutrition of these organs through nervous influence, have been advanced.

I would also remark on the incomplete and varying ptosis, clearly due to slight and varying pressure exerted by the tumour on some of the closely adjoining fibres of the third nerve; and on the constant torpor, the dulness of apprehension, and slowness of recollection, evinced by the patient, resulting from the general pressure from which the entire cerebral mass must have suffered.

Fungoid Tumour of the Brain: Blindness: Compression and Atrophy of the Optic Tracts.

SECTIO CADAVERIS, thirty hours after death. *Head.* The veins of the dura mater and the longitudinal sinus were very full of dark blood; the cerebral substance also was much loaded with blood. The vessels at the base of the brain, and the entire substance of that organ and of the pons and medulla oblongata, were quite healthy.

A large firm tumour occupied the lower part of the middle lobe of the right hemisphere of the brain; it was very irregular in shape, nodulated, about three inches each way. It rested upon the middle fossa of the skull, where it was covered by a thin layer of cerebral tissue; it was also connected closely with the substance of the brain posteriorly; but in other parts its surface had little connexion with the surrounding tissue; at least, it was perfectly clean after the tumour had been removed. It projected into the right lateral ventricle; had pushed forward the hippocampus major, which curled over its surface; and had so greatly compressed the optic thalamus, and expanded it, that the ordinary shape of that body was quite obliterated. The corpus striatum was intact. At the base, the tumour, by its pressure, had given a twist to the central organs, depressing the corresponding crus, and throwing up that of the opposite side. The same twist was observed on the upper surface of the mesocephale, in the oblique position of the corpora quadrigemina. The tumour projected close upon the place where the right third nerve emerges; the trunk of the nerve was, however, entire. The optic nerves were healthy; but the right optic tract was compressed and completely flattened between the tumour and the crus, whilst the left crus was so much forced upwards as to cause a like pressure of the left tract between it and the middle lobe of the brain. In consequence of this distortion, the left tract was nearly as much flattened as the right. By a very careless accident, I destroyed the right optic tract; but the left tract, examined under the microscope, presented hardly any indication of its normal tissue; some short fragments floating around were nearly all that remained of its tubules. The anterior pyramids and the spinal cord, examined microscopically, were quite healthy.

All the other organs of the body were healthy, but were much loaded with blood. No secondary formation of cancer was discovered.

The tumour presented the usual appearance of encephaloma of a firm character; it exuded only a clear

fluid. It appeared composed mainly of caudate nuclei, with fine fibrous tissue. The nuclei varied in diameter from 1-750th of an inch downward, and each presented a long caudate appendage.

History. W. G., aged 28; married; labourer. We were, unfortunately, compelled to rely entirely on the patient for information; and his torpid condition rendered his history more scanty than could be desired. Eighteen months ago, he was stunned by a heavy blow on the back of the head. He kept his bed for a month afterwards, and it was three months before the wound healed. A small cicatrix over the apex of the occipital bone was, however, the sole remains of the injury, the bone being quite uninjured.

His present illness was only of ten weeks' duration. It began with severe frontal pain, which at once disabled him from work, and more than once kept him in bed for a day or two. A fortnight ago, his sight began to fail. It went a little at first, and only at times; but the blindness rapidly increased, and now is almost complete. He thought that his hearing had been impaired for a month. He had never had any sickness.

I did not see the patient for the first fortnight of his residence in hospital; but it is noted that, when admitted, he complained of severe pain in the frontal, temporal, and occipital regions. In the back of the head, the pain was more severe than it had ever been before; he had also much vertigo. He was very torpid.

The pain increased in severity, especially in the right temple; and when in greatest suffering, the patient placed himself on his hands and knees, with his head hanging low. The head was quite free from heat. The mental faculties became more dull. The pulse was 64.

On the twelfth day after admission, I found him heavy and sleepy, inclined to talk foolishly; but, when thoroughly roused, sufficiently intelligent. Nevertheless, apprehension was obviously slow. He spent his days mainly in sleeping, partly from the effects of opium required to ease the pain, and partly from extreme torpor. The pulse was 64, feeble; respirations 20. He was nearly blind, only just distinguishing the presence of any body between him and the light. The pupils were much and equally dilated. Hearing was perfect.

There was partial ptosis of the right eyelid, but subject to singular variation, diminishing to a very considerable extent when the patient was fully roused. With this exception, the function of all the cerebral nerves, and even of the right third pair, was perfectly normal, excepting that there was some convergence of the axes of the eye, probably consequent upon the loss of the guiding power of vision.

No evidence of paralysis in the limbs could be obtained, excepting only that the movements of the right lower extremity seemed rather formal; but he appeared unable to balance himself, and could not advance without some one at hand to steady him. I should, however, say that the patient's dulness, his obvious weakness, joined with the confusion consequent upon recent loss of vision, rendered the evidence on this point not perfectly conclusive.

A day or two afterwards, when more awake, he gave us with accuracy some details of his history; but the long pauses testified difficulty in arousing his memory.

He was admitted December 17th, and died on the 28th of the following January. He did not present any important change in the symptoms. Sometimes the pain was absent for some days; then it would return with severity, the patient assuming the peculiar posture noticed before, and moaning very much. The ptosis also retained its marked variability. His pulse remained about 68. Towards the last he wandered somewhat, and then became so dull that it was impossible to rouse him; and finally he passed his evacuations involuntarily. Some dysphagia also presented itself at this period of his case.

His torpid condition quite precluded examination by the ophthalmoscope, though two attempts were made by my friend Mr. Bartleet.

LIVERPOOL NORTHERN HOSPITAL.

CASES OF ACUTE DISEASE OF THE CHEST.

Under the care of A. T. H. WATERS, M.D., Physician to the Hospital.

[*Continued from* page 606 *of* vol. i *for* 1864.]

CASE XXVIII. *Pneumonia: Recovery.* (Reported by F. T. ROBERTS, M.B., Junior House-Surgeon.) W. S., a labourer, 30 years of age, was admitted into the hospital on March 23rd, 1864. He said he had been much exposed to cold, and that, three days before admission, he was seized with pain in the right side. He did not, however, give up work till the following day—viz., March 21st. On admission, he complained of severe pain in the right side, cough, and dyspnœa. The pulse was 120; the respirations were 40 per minute. The skin was hot and dry, and the tongue furred. There was deficient movement of the right side of the chest, with crepitation all over the back of the right lung. He was ordered a quarter of a grain of antimony every four hours, a blister to the right side, and beef-tea.

On the 24th, the pulse was 116; the respirations were 32.

On the 25th, the pulse had fallen to 108; the respirations were 40. The pain in the side continued. He had expectorated some rust-coloured sputa. He was ordered a grain and a half of opium at bedtime, and five grains of carbonate of ammonia every four hours. Three ounces of port wine were given at night.

On the 26th, the pulse was 88; the respirations were 26. He had slept, the pain was less, and he was generally improved. There was dulness with crepitation over the front and side of the right lung; but there was no dulness at the base behind, and the breathing behind was good. The opium was repeated at bedtime; he was ordered four ounces of wine; and some ipecacuanha was added to the ammonia mixture.

On the 27th, the pulse was 68. He had slept well, and was decidedly better. The opium was repeated.

On the 29th, the pulse was 70. He complained of a good deal of pain in the chest, which was relieved by the application of croton-oil liniment.

He rapidly improved from this date. He continued the ipecacuanha mixture, and had six ounces of wine daily.

On April 1st, the breath-sounds were normal all over the right lung. He was discharged well.

CASE XXIX. *Pneumonia: Recovery.* (Reported by F. T. ROBERTS, M.B., Junior House-Surgeon.) Patrick F., a carter, 36 years of age, of spare body and somewhat intemperate habits was admitted into the hospital on August 8th, 1864. On the morning of admission, at an early hour, he was out in a shower of rain, got very wet, and did not change his clothes afterwards. In the course of two or three hours, he felt pains in his limbs, and had severe rigors. Soon after he was seized with severe pain in the left side.

When admitted into the hospital, about midday, he complained of a severe pain in the lower part of the left side, increased on inspiration. There were no febrile symptoms, and no abnormal physical signs about the chest. He was ordered a dose of chlorodyne,