tion in each of the several diseases that fall under the cognizance of the surgeon, so much as to communicate to you a knowledge of the general principles of the pathology of those diseases, and certain general rules, founded upon that knowledge or suggested by experience, which may be your guide in their treatment. The details of the symptoms and treatment of particular diseases have, with few exceptions, been left to be supplied by clinical instruction and observation. Neither, on the other hand, have I entered into that wide domain of pathology which, to speak in general terms, includes the morbid conditions of the circulatory and excretory fluids—a subject of fundamental importance and of daily increasing interest to the surgeon no less than to the physician—because I am aware that it is very fully brought before you in the lectures of the Regius Professor of Physic.

I have repeatedly had occasion to remind you that disease is but a result of some modification of the natural processes of nutrition; that the presence of fresh materials and the operation of new forces are by no means implied by its existence. However heterogeneous the morbid product may appear, however different its course may be from that impressed upon the natural structures, and however destructive to the neighbouring tissues and to the well-being of the body it may prove, nevertheless its nutrition is conducted on the same plan, and it follows in its growth and decay the same general laws as the normal constituents of the frame. Nay, more, I have endeavoured to give you reasons for believing that the greater number, if not all, the tumours, instead of being “new formations,” as hitherto regarded, are in reality only hypertrophic conditions of circumscribed portions of the original tissues. Should more extensive and more accurate observation prove this view to be correct, much will have been done to simplify our ideas of the pathology of these masses; and when we reflect on the great advances in modern pathology effected by those who have directed attention to the diseases depending upon imperfect nutrition, it is surely not unreasonable to expect that the converse state of nutrition will prove to be highly, if not equally, deserving attention. Accordingly, a very large share of our time has been devoted to the consideration of the two great subjects, atrophy and hypertrophy. I may have appeared to lay too much stress upon them, and to have stretched them a little too far, in forcing them to embrace so many and such various products. But the more I reflect upon the matter the more convinced I feel that the *plus* and *minus æquo* of nutrition are of most extensive influence. Sometimes, indeed, I am almost disposed to think that a more accurate and deeper knowledge of physiology may enable us to arrange all morbid products under one or other of these two heads. To attempt this, however, at present would be giving generalization an undue precedence of investigation, and would savour too much of that tendency to bend facts into an accordance with theory, which is so detrimental to the true progress of science.

ABSCESS IN THE RIGHT LOBE OF THE CEREBELLUM,

WITH CARIES OF THE PETROUS BONE.

By W. BUDD, M.D.,

PHYSICIAN TO THE BRISTOL INFIRMARY.

Read at the Quarterly Meeting of the Bath and Bristol Branch, Oct. 2, 1851:

GEORGE BELL, aged 13, of spare habit and delicate appearance, but never before the subject of serious illness, was laid up in the beginning of June, 1851, with an attack which was at first considered to be one of simple fever. Two circumstances were, however, remarked, which the sequel showed to be of great importance. These were, severe headache chiefly confined to the right temporal region, and a slight discharge from the right ear, with some deafness on the same side.

For the relief of these complaints leeches were applied to the temple and behind the ear, followed by a blister to the same spot. Salines and a few gentle doses of mercury were given internally. Under this treatment the pain abated, the febrile symptoms entirely subsided, and in the course of a few days the boy was able to return to school and resume his usual occupations. The pain in the temple, however, never entirely ceased. It was described as a dull pain, occasionally attended with *throbbing*. Up to this time there had been no vomiting, and no disorder in the motor or other powers of the nervous centres.

On the 12th of June he was again laid up, and on the following day Mr. Tribe, his usual medical attendant, was sent for. The pain of the head had once more become severe and abiding. It was limited still more strictly than before to the right temple, occupying, according to the patient's own description, a space not broader than a crown piece; it was not acute or lancinating. There was still considerable deafness of the right ear, but the discharge had ceased. In addition to this, a new symptom of great significance had made its appearance. Two days previously the speech had become thick and indistinct, and was now, at times so imperfect as to be almost unintelligible. Mental faculties unimpaired; memory accurate; no strabismus; no lateral or other deviation of the tongue; no sickness; pupils somewhat dilated, but equal and sensitive, vision good. No heat of surface; no thirst; extremities rather cold than otherwise; tongue moist but thickly coated; bowels torpid. Pulse about 100 in the minute, weak and fluctuating. Complexion pale; countenance deeply marked with the stamp of suffering.

On the following day it was observed that his gait had become insecure, and in particular that there was some dragging of the right leg. The face, also, was drawn, but to which side was not noted. The pain of the head had extended itself across the forehead, and the patient had become drowsy. He had also vomited several times, rejecting everything as soon as taken, with the exception of milk, which sat well on the

stomach. The bowels had been freely acted upon by an aperient, administered the day before.

Under these circumstances it was decided to put the patient speedily under the influence of mercury, and to employ extensive counter-irritation. With this view, three grains of blue pill were given every four hours, and a blister was applied to the nape of the neck.

On the following day four grains of iodide of potassium were given with each dose of the blue pill, and a blister was applied to the shaven scalp.

On the 16th the pain had extended to the back of the head, and there was at times double vision. The vomiting and drowsiness continued.

On the 17th, that is to say, the fifth day after the relapse, marked amendment set in. The pain had much abated, being felt in fact only when the head was moved. The utterance had become much more distinct, and the deviation of the features had disappeared. The drowsiness had ceased, and the vomiting had become much less frequent. There was still, however, some slight thickness of speech, occasional double vision, and irregularity of pulse.

On the 19th he had so much recovered as to come down stairs, and on the 20th he dressed himself and came down without help. During the greater part of this day he amused himself with his pencil, and several complicated heraldic drawings executed with a firm and clear outline, which are still extant, show better than any other evidence how entirely the right arm had recovered from the loss of power with which it had been affected.

Up to the 1st of July the amendment had suffered no check. On that day he was down stairs and running about, and quite cheerful. It is worth notice, that he occupied himself a good part of that day with a box of carpenters' tools, and that he handled them with his usual freedom and effect.

As the changes found on examination after death, when coupled with the history already given, leave no doubt that at this time one, if not two abscesses, of considerable size, existed between the folds of the right lobe of the cerebellum, such an amount of recovery as this must be looked upon as a very remarkable circumstance, and as one which might readily lead an incautious practitioner to give a favourable prognosis. The only trace of cerebral disorder that still remained, was some slight thickness of speech.

The hopes that had been raised by this favourable change, were, however, swept away on the following day, the 2nd of July, by a return of the former symptoms, in still greater violence than before.

On the 3rd of July I saw him for the first time, in consultation with Mr. Tribe, to whom I am chiefly indebted for the notes of the case.

The condition of the patient was then very striking, and characteristic of severe intracranial mischief. The pain in the head, at all times severe, was occasionally so acute as to extort moans and cries. A very remarkable characteristic of the pain was the intense degree to which it was aggravated by any, the slightest, movement of the head, voluntary or communicated. The

dread he showed at every such attempt could not be readily forgotten by any one who had once witnessed it. The chief seat of the pain appeared to correspond with the base of the occipital bone on the right side, although, in less severity, it affected the whole head. His brow was deeply knit, and his whole aspect bore the impress of great suffering. He was very drowsy, withal, so that his whole time was divided between dozing and acute pain. He yawned frequently. His pupils were much dilated, but equal and sensitive, and he was very intolerant of light. There was no discharge from the right ear, and with that ear he could hear the ticking of a watch at the distance of several inches. Everything he took, whether in the shape of food or medicine, was vomited as soon as swallowed. The pulse varied, but at the time of my visit gave only forty strokes in the minute. The belly was deeply sunken and retracted; the skin peculiarly dry and harsh. The grasp of the right hand was thought to be somewhat less firm than that of the left, but there was no impairment or loss of motor power (in the way of paralysis, that is,) in any other part. His mind was clear, and memory good. His speech was thick, but sufficiently intelligible. There had been no fit or convulsion from the first. The urine was scanty, and of high specific gravity, throwing down on being boiled, a precipitate which was immediately redissolved on the addition of nitric acid. The tongue was coated with a thick yellow paste. From this time to the 7th of July there was little change, except that the vomiting became gradually less urgent. On that day, to the surprise of all, he began, for the third time, to mend; the pain in the head abated, the drowsiness lessened, and the sickness became less and less frequent. From this time he steadily improved, and on the 13th July was so much better, that it was agreed I should suspend my visits for some days. The head was now almost free from pain, he moved with ease and freedom, and the vomiting had quite ceased. His utterance had become much clearer; his tongue much cleaner; he began to take light nourishment, with relish; his bowels, for the first time, acted without medicine. Although there was nothing amounting to paralysis, he had still a more perfect use of the left than of the right arm, so that he fed himself, for instance, by preference with the left hand.

On the 14th he was put in a warm bath, which he enjoyed much, and on being taken out he stood for some time, leaning for support against his father's shoulder. This amendment was of short duration.

On the following day he became much worse. Several times during that day he was seized with severe paroxysms of pain, lasting many minutes. During this time the eyes were fixed, the pupils became gradually more and more dilated, and presently the agony merged into unconsciousness. He then lay for some time in a state of deep stupor, from which he gradually recovered. Although there was no convulsion, each of these attacks was followed by great exhaustion.

From this time he lingered, with very little change, and no new phenomena, until the 17th July, when he

expired, rather suddenly, after one of the paroxysms just described.

The powers of the left hand and arm were unaffected throughout, with this single exception, that for a short time on the 9th of July the fingers were spasmodically bent on the hand. He helped himself to a cup of coffee without difficulty with that hand about half an hour before his death.

The principal agents employed in his treatment were blisters, and mercury both internally and by inunction. Latterly opiates were given to lull the pain, and alkalies for the sickness, but these last had little or no effect.

The body was examined twenty-six hours after death. On opening the head the ventricles of the brain were found to be enormously distended with perfectly transparent serous fluid; the quantity was not measured, but must have amounted to at least half a pint; one of the ventricles was, in fact, accidentally opened by the saw, in removing the skull-cap, although the brain was by no means deeply wounded. The convolutions of both hemispheres were so much flattened by the pressure, that the sulci between them were entirely effaced. On pursuing the examination, the explanation of this state of things was found in the condition of the *venæ Galeni*, which were flattened, and contained no blood; the return of blood through them had been obstructed by the pressure of underlying disease, and dropsy of the ventricles had resulted. A few transparent, and very minute granulations, which were only visible when looked at obliquely, were scattered over the arachnoid at the base of the brain. With this exception the state of the cerebral membranes, whether of the surface or ventricles, was perfectly normal; they presented no trace of inflammation, and the structure of the brain itself was sound. The inferior aspect of the right lobe of the cerebellum was attached to the *dura mater* by slight adhesions. On further examination this lobe was found to be the seat of three distinct abscesses; of these, two were situated between two of the deep folds which traverse the lower surface of the cerebellum. It is important in reference to the history of the case to remark, that their presence involved no breach of fibre or other structure, although from their size they must have exerted severe pressure on surrounding parts. One of them was about the size of a Spanish nut, the other would have easily contained a large walnut. Both were lined by a distinct membrane, of new formation, to which a layer of concrete pus of some thickness was adherent. These characters were best marked in the smaller of the two abscesses, which, if any inference may be drawn from such appearances, seemed to be the older of the two. The third abscess was still larger, and was formed at the expense of the substance of the cerebellum itself. The central part of the right lobe was almost entirely converted into pus, so that the whole of this lobe might be represented as a bag of matter, whose walls were formed by grey substance. The small portion of white substance still remaining was broken up, and consisted chiefly of diffuent pulp. At one point, corresponding to the root of the rhomboidal body, a small extravasation

had occurred. This abscess was lined by no membrane, and had no definite wall, the part in which the suppuration was complete shading off gradually into broken-up nervous tissue. The pus it contained was also much more fluid than that of the other abscesses. From these characters there can be little doubt that it was the most recent of the three. The left lobe and other parts of the cerebellum were free from disease. On examining the interior of the skull itself, a yellow spot, about the size of a pea, was discovered over the petrous portion of the right temporal bone. The *dura mater* was here separated from the skull beneath by a thin layer of concrete pus lying upon the carious bone, but there was no trace of inflammation or other disease in the cerebral aspect of the membrane. Over this space the bone was destroyed in its whole thickness, so that on lightly scraping it with a scalpel the cavity of the tympanum was brought into view. This cavity was filled with opaque lymph, of a reddish yellow, but on the removal of this the proper bones and muscular apparatus of the ear were seen to be still in place. The tympanum was slightly thickened and opaque, but with this exception was sound, as was also the *meatus externus*. It was ascertained that the lungs were free from tubercle, and that the heart was healthy, but the other viscera were not minutely examined.

CASE OF EPIDEMIC MUMPS,

COMPLICATED WITH PAROTITIS, ORCHITIS, NEPHRITIS, ALBUMINURIA, CONVULSIONS: RECOVERY.

By JOHN BURNE, M.D., F.R.C.P.,

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Read at the Quarterly Meeting of the Bath and Bristol Branch.

THE subject of this case was a young gentleman 12 years of age, of fair complexion, red hair, and in good general health. He was at school and was first seen by Mr. Giles, of Frome, on the 7th of November last, suffering from a slight cold and sore throat.

On the 10th, being the fourth day from the attack, the parotid and submaxillary glands were swollen, principally on the left side, but the health did not fail, the patient eating and going about as usual. Other boys in the school were also affected with the mumps at this time.

The swelling of the salivary glands persisted till the 22nd, (twelve days,) when it receded, and on the 24th the testicles became affected, the *left* chiefly. The tumefaction of the testicles subsided in the course of two days, and now a slight puffiness of the face was observed, and slight delirium was manifested during the night. On the following morning the boy was collected and cheerful, but in the course of this day there came on drowsiness, and at half-past five o'clock he was seized with violent convulsions and extreme restlessness, getting out of bed with great strength. The convulsions were frightful and continued nearly four hours, during which, first the right arm, afterwards