

caſion to repeat arteriotomia. He was ſeveral times afterwards delirious for a ſhort time. However, on the 25th, he awoke ſuddenly in the night, in conſequence of feeling an unpleasant ſenſation in his right ear, which proved to ariſe from the burſting of an abſceſs. He ſuſſeſſed that about two table-ſpoonfuls of matter came away. From this time he recovered very rapidly, but he ſtill feels ſome pain from any ſudden agitation, whether of mind or body.

I am aware, that, in the treatment of this caſe, my practice muſt appear to have been inconſiſtent, and I confeſs, that, till the evening of the 9th, I agreed with the apotheſecary in thinking it to be a caſe of typhus. I however then ſaw that there was great local congeſtion, accompanied with conſiderable general debility; indeed, ſo far were thoſe two ſeemingly oppoſite ſtates of the body combined, that I have great reaſon to believe, if I had not taken away blood one hour, and almoſt the very next ſupported my patient's ſtrength by wine, he would not at this time have been living.

Halifax, 18th April 1807.

IX.

Cases of Typhus Fever, with Observations. By A. WOOD, Member of the Royal College of Surgeons, London.

CASE I.—June 1st.—JAMES REID, a robust labouring man, after expoſure to the infection of fever, began to complain, two days ago, of the uſual ſymptoms of that diſorder;—ſlight headach, pains in the limbs, indolence, tranſient fluſhings of heat, preceded by chillineſs and rigors. This was the account I received of him; and, being unable to ſee him before the evening of the following day, I ſent him ſome active cathartic medicine, with injunctions that he ſhould abſtain from all food and drink of a ſtimulating nature.

June 2d.—On viſiting him, I found the medicine had operated briskly, producing numerous evacuations of a glarey reddiſh appearance. He had paſſed a reſtleſs night, talking to himſelf in an unconnected manner, and not answering queſtions until they had been repeatedly put to him. He had headach, thirſt, a coated tongue, brown at its baſe, hot and parched ſkin, and

a pulse beating 110, with a vibratory feel. I was informed, that, for a great part of the preceding night, he had complained heavily of pain, and a sense of fulness in his stomach and bowels; but this had left him after a severe fit of vomiting. Sixteen ounces of blood were taken from his arm; and a powder, containing a grain of calomel, three of ipecacuanha, and ten of jalap, ordered to be taken every four hours.

3d.—On this and the following day I had no opportunity of seeing him. There was said to be no material change in the symptoms, except that he felt considerable pain in the left side of the abdomen. The powders had answered the intentions for which they were given, operating copiously on the stomach and bowels;—they were directed to be continued.

4th.—The pain in the abdomen was described as being extremely severe, and a blister was prescribed for it. Constant nausea, vomiting on taking liquids, with frequent dejections from the bowels, were said to be the effects of the powders. In other respects, the attendants thought him better; the pain in his head being less violent, and his mind more composed.

5th.—I found him much improved. The pain in the abdomen, which, from his description, must have been very acute, had entirely left him in about two hours after the application of the blister, and had not returned. His tongue was becoming moist, and assuming a better colour, and his other febrile symptoms had much abated. A dose of sulphate of magnesia was directed to be taken every second morning, and the powders to be omitted. In a week he walked four miles to call upon me, and was then free from fever.

CASE II.—June 2d.—ALICE ECCLES, a delicate young woman, living in a crowded and filthy court, from which fever had not been absent for nearly a year, had been confined a week when I first saw her. In addition to the usual routine of symptoms when fever has existed some time, she had intense thirst, and a constant burning pain at the pit of the stomach, aggravated by retchings to vomit, which were frequent. Her breathing was short and hurried, her tongue covered with a thick yellow fur, her skin hot;—she had confusion rather than pain of the head, and slight mental wanderings. Her bowels were said to be purged; but, on strict inquiry, I found the evacuations, though numerous, dark and scanty, of a slimy appearance, and fetid smell. I took ten ounces of blood from her arm, when she fainted; and directed two drachms of sulphate of magnesia every two hours, and five grains of calomel at bedtime.

3d.—The vomiting ceased, and with it the pain at the stom-

ach, after taking two doses of the salts. She has had several motions of a similar character with those she had yesterday. Her head was hot and painful, and she had been slightly delirious during the night. Her tongue was coated with a thick covering of brown fur to its very tip; and the secretion from its surface hardened so speedily, that she was constantly employed in scraping it off with her teeth, and spitting it out in small round lumps. Her pulse was 120, and her skin excessively hot. The same powders were prescribed for her as in the former case.

4th.—The operation of the powders had been somewhat severe, though their effects on the complaint were such as to induce me to wish her to persevere in taking them. She had vomited repeatedly, and her stools were described as having been almost innumerable. At her urgent request, I consented to a dose being taken twice a-day only, with intermediate doses of sulphate of magnesia.

5th.—She was convalescent, all her symptoms being diminished in violence. She had passed a good night; sleeping soundly in the intervals between her calls to the night-chair. These calls had been frequent.

6th, 7th, 8th.—She continued to recover. The same plan was persisted in, gradually decreasing the quantity of medicine. After this time I frequently saw her in the street, following her usual avocations.

September 20th.—The same woman came to me, wishing to be bled. On inquiring into her reasons for it, she complained of a heaviness and dull pain of the forehead, with want of sleep and appetite; and on making an attentive examination, it was evident she was again labouring under her former complaint. I bled her to the amount of 12 ounces, and desired her to take some opening medicine; but this she declined, having been, in her own opinion, “purged enough for her whole life.” Since her last illness, she had been repeatedly exposed to contagion; or, rather, she had been living in an atmosphere thoroughly saturated with infectious effluvia, the house in which she resided, and generally the room in which she slept, having had one or more cases of fever in them, and ventilation entirely prevented by ingeniously contrived plans for the exclusion of “the cold.”

24th.—I was desired to visit her. The disorder, since the 20th, has been gradually unmasking itself, and assuming a more decided character. She has now typhus of the simple kind completely developed;—headach, pains in the back and limbs, uneasiness at the stomach, the bowels confined, hot and dry skin, &c. The powders were directed every six hours.

25th.—The pain in the head is much increased, with frequent startings and moaning during sleep, and a disposition to ramble and complain while awake. She was bled to 10 ounces;—the powders continued, and three grains of calomel given every night.

26th.—The symptoms were much the same, and the same remedies were persevered in.

27th.—Though the violent excitement which was so prominent on the 25th is in some degree subdued, she still complains of pain in the head, and there is evidently great vascular irritation through the whole system. Far from being reduced by the plan which has been pursued, she speaks more boldly and distinctly, has greater power to raise herself in bed, and is, in every respect, stronger, more composed, and cheerful. Her tongue has a yellow streak of fur running along each edge to the tip, while the middle has the dry glazed appearance of a half-broiled beef steak; and the interstices between her teeth are filled with the same kind of matter which she was in the habit of scraping from her tongue in her former illness. She was again bled; and when 14 ounces of blood had flowed, she fainted. A solution of sulphate of magnesia, with antimonial wine, was ordered in place of the powders.

28th.—She complained of incessant but unavailing calls to the night-chair. Half a grain of opium was added to the night dose of calomel, and the purging mixture omitted.

29th.—I was gratified exceedingly to observe the amendment which had taken place during the last two days: there was not an unpleasant symptom in the case which was not considerably relieved.

30th.—She continued convalescent. To omit the calomel and opium.

Oct. 1.—Since the 29th, she has had but trifling evacuations from her bowels; and this day she complained of headach. A dose of calomel and jalap was directed to be taken immediately, and repeated the following morning.

2d.—She described herself as quite well, but weak. In a few days she was out of doors.

In this case I have described a state of the tongue which I have very frequently observed in typhus fever. Sometimes, instead of the yellow streak on each side of the glazed surface, the edges of the tongue will have a florid red appearance, and be perfectly moist, giving an appearance as if they were painted with blood; at others, the whole surface of the tongue will present the same uniform, cracked, baked look, which I have com-

pared to the lean part of beef half broiled. I am induced to notice this particularly, since it has become the surest guide I know of in forming an accurate prognosis; for, whenever I observed the gradual extension of a white fur on the tongue, I could with confidence assert, that an improvement would soon take place; though, on the most minute and attentive examination of every other symptom, not the least change or amendment could be detected. In the cases where recovery was rapid, the tongue would be loaded with a fur of this kind, of considerable thickness, in the space of a day or two, and, in many instances, it remained a week or ten days, after every other symptom, save debility, had disappeared. I have not been able to trace any regular connection between these varied conditions of the tongue and the nature of the affection, or the organ principally suffering, though I think it not improbable that such connection may really exist.

I am convinced, however, that the want of secretion from the surface of the tongue in these states of that organ, is no proof of a similar deficiency in the stomach and bowels; since I have repeatedly observed it to continue, and even to come on during a state of active purging. I think we are beginning to act more wisely in examining the tongue, less with reference to the digestive organs than to the vascular system.

CASE III.—Sept. 23d.—KEAN, a girl aged 13, I saw on the fifth day of fever. Her symptoms presented nothing of a remarkable character, except a severe pleuritic pain in the left side, near the region of the heart, most severe during inspiration, and attended with a dry, short, and frequent cough. I attempted to bleed her, but failed, from the unusual smallness of the vein, and the girl's timidity. I directed powders of a similar description with those in the two former cases, and recommended a blister; but its application was prevented by the officious interference of one of her mother's gossips.

24th.—The pain in the side was not felt after the operation of the second dose of medicine. She has been plentifully vomited and purged, and is full as well as yesterday. For the next three days my notes contain little information. She persevered in taking the powders, and was occasionally better and worse. The note for the 27th concludes with,—“Upon the whole, though she is not suffering severe pain, the febrile symptoms are not at all mitigated. She has a brown, coated tongue, hot skin, pulse 116, with constant moaning, and, when disturbed, delirious conversation.” Sulphate of magnesia was prescribed in place of the powders.

28th.—She has had no sleep during the night, but has talked incessantly. Her pulse is 110, and her other symptoms the same as yesterday. Her bowels are perfectly open, large quantities of a stone-coloured fluid matter being frequently evacuated. Six ounces of blood were taken from her arm, and the salts continued.

29th.—The night has been passed quietly, though without much sound sleep. She seems recruited this morning, and answers questions more readily and rationally.

30th.—She continues better.

Oct. 1st.—Appearances are still favourable. There being considerable irritation of the stomach and bowels, from the long-continued exhibition of purgative medicines; two grains of calomel, and half a grain of opium, were ordered to be taken at bedtime, and the salts omitted.

5th.—Since the last report she has improved considerably. The opiate has always procured tranquil sleep, with a gentle moisture of the skin; and she wishes much to continue it. It was however omitted, and a dose of calomel and jalap prescribed to be taken in a few days. Soon after this time I saw her quite recovered.

Since the publication of Dr Clutterbuck's excellent speculative work on fever, the attention of pathologists has been forcibly directed to the examination of the brain, in their anatomical researches into its seat and nature; and it may be regarded as a circumstance strongly confirmative of the correctness of that gentleman's ideas, that morbid appearances of the brain are now described as existing in a far greater proportion of cases than formerly. Yet physicians are not unanimous on this head. In an useful essay by Dr Mills of Dublin, wherein the utility of blood-letting is placed in a striking and very advantageous point of view, an arrangement of the varieties of typhus fever is proposed from the organ principally affected, and which he denominates its seat. Agreeing with Dr Mills, "that in every fever there is an inflammation of some one or more of the viscera, or other parts," I cannot but think his conclusions somewhat premature, when he decides that its seat may be various, as evidenced by the superior urgency of the symptoms, and the more perceptible character of the consequent disorganization; for, since cases of dissection are still frequently related, in which there is said to have been no morbid appearance whatever, and as it is inconceivable that inflammation sufficient to cause death should take place in any organ, except perhaps the brain, without leaving cognizable signs of its pre-existence, is it not a rational deduction from Dr M.'s own premises, *that fever never occurs without*

local over-excitement, that "cephalic fever" has in these instances destroyed the patient? If this be granted, it follows as an inevitable conclusion, that where inflammation of the thoracic or abdominal viscera has occurred, and proved fatal, an affection of the brain may have preceded and accompanied it, and contributed to its production, by increasing the general excitement of the system. The absence of pain in the head during the life of the patient cannot be estimated as bearing much on the question, when the low degree of sensibility of the brain is considered; and it is remembered that acute pain is not felt in inflammation of the substance of the lungs, or of the parenchyma of the liver, whilst inflammation of their investing membranes gives intense pain. Analogous to these is phrenitis, and also incipient hydrocephalus, in which there is inflammation of the process of pia mater lining the ventricles; and reflecting on the delicacy of the functions of the brain, and the facility with which they are abolished, I think that, until we possess a more intimate acquaintance with its healthy structure, it would be too confident a presumption in our own knowledge to say when it is sufficiently diseased to have been the cause of death.

Opinions approaching in some measure to those of Dr Mills have been promulgated by Dr Armstrong, in his judicious and discriminating "Illustrations." In one point, however, there is a difference of some importance in a theoretical light. While Dr Mills asserts that there is no fever without local inflammation, Dr Armstrong expresses his conviction that "inflammation is *not* its inseparable and essential constituent;" and afterwards concludes, that, fever being a disease of simple increased excitement, inflammation, if it come on, is to be regarded as a consequence, and not a cause. He attributes its accession, in "*almost every case*," to the application of cold, or "*some predisposition in the part affected*." A question, perhaps not an improper one, might here be proposed to Dr A. Will the state of general vascular excitement which you call fever, independent of its connection with local inflammation, or combined with it in any organ except the brain, account for the phenomena of typhus, particularly the striking and peculiar derangements of the nervous and intellectual systems? The latter part of the question is of course equally appropriate to Dr M.

It would be a work of supererogation to state the arguments that may be advanced in support of the notion, that, in all cases of fever, the brain is primarily inflamed, since it has been so elaborately, and, to me at least, satisfactorily done by Dr Clutterbuck. I will say nothing of the common or specific nature of the in-

flammation, for whichever way we move we are involved in equal perplexity;—if we call it common, we feel puzzled to account for its infectious properties, and its observance of peculiar and certain laws;—if specific, we admit our total ignorance of its real nature.

I come now to notice the cases which introduce this communication. I have selected them from a considerable number, partly because they exhibited those affections of the thoracic and abdominal viscera, which, in all probability, would have induced Dr M. to consider them as the seat of fever, and Dr A. the parts to which his remedies ought principally to have been directed; and partly because these affections were removed by means directed to the disordered state of the sensorium. In the first case, from the pain and tenderness to the touch of the abdomen, it might very naturally be concluded that inflammation existed in the peritoneum or intestines; yet this supposition is rendered dubious, from the bowels being all the time amenable to the operation of purgatives, and the sudden removal of the pain on the application of a blister. In case the second, the stomach showed symptoms of active inflammation; but they were removed by one bleeding, *ad deliquium*, and opening medicines. And in the third case, where the symptoms of inflammation were most decided, the patient recovered from them, though positively nothing was done that could affect them in a direct manner. Reasoning from these facts, whose number I could readily increase, it seems a necessary conclusion, either that the pain and other symptoms were mere depraved sensations, arising from sympathy with the morbid condition of the brain, or that inflammation of these parts, occurring with typhus fever, is capable of being removed by means which would be totally inadequate in its uncombined form. I incline to the former of these opinions, from the frequency with which symptoms indicative of a pleuritic or hepatic affection attack patients a few days before death, and continue unsubdued till that event takes place, when, on examination, no traces, or, at most, very trivial ones, of previous disease are discovered. Whether or not we admit, with Dr Darwin, that sensation is the result of actions in the extremities of nerves, common experience will bear us out in asserting, that a continuance of inordinate or depraved sensation will occasion an increased determination of the blood to the part, and in the end lead to the establishment of indisputable inflammation. These local and accidental symptoms *seem* in many instances to demand a mode of treatment little suited to the other circumstances of the case, and are apt to withdraw our attention from the less obtrusive, but in general far more dangerous brainular affection.

However much we may feel disposed to dispute the correctness of Dr Hamilton's explanation of the *modus operandi* of purgative medicines in fever, we cannot but admire the candid and unassuming manner in which it was introduced into public notice. It is now, I presume, an almost universal conviction, that their beneficial effects do not arise so much from their merely removing irritating matter, as from the powerful qualities they possess of correcting disordered, and increasing diminished secretion of the organs concerned in digestion. If the influence of the brain over the stomach and bowels appear striking and remarkable, it is not the less wonderful how speedily a change in the secreting surfaces of those parts operates back again upon the brain; and nothing but a belief in the general acknowledgment of the fact prevents me relating some interesting cases described in Mr Abernethy's admirable Lectures. Next to blood-letting, I hold the exhibition of purgatives to be the most efficient remedy in fever. Besides the immediate counter irritation on the brain, produced by them, they are serviceable in withdrawing no inconsiderable quantity of fluid entirely out of the circulation; and more than this, like every other means which produces a powerful impression on the system, they appear occasionally to arrest the progress of fever, by breaking into and destroying the association of morbid actions which constitutes its formation. By joining emetic to purgative ingredients, a more *extensive* operation is insured; and I have usually added calomel, in the hope that its peculiar effects on the liver, and on secretion at large, would co-operate in the general intention. It is not the giving an emetic in the commencement of the disease, and a purge for a few mornings after, that I intend to advocate, but the keeping up for two or three days a never-ceasing action, by regularly repeated doses.

In mentioning the opinions of individuals, I trust that I have never intruded on the respectful distance which ought always to be observed in canvassing the doctrines of eminent men. The intelligent author of the Notes to the fourth canto of Childe Harold has an extract, concluding with sentiments as applicable to philosophy in medicine as in religion or politics. "Philosophy, wisdom and liberty support each other; he who will not reason, is a bigot; he who cannot, is a fool; and, he who dares not, is a slave." However damning may be some of the sins of the present race of medical men, they will at least escape the imputations of profound and slavish submission to names and nonsense, with which their predecessors have been not unjustly taxed.

Rochdale, Oct. 18, 1818.