

powers of the system. On the *first attack* of the inflammatory forms, the strength of the patient is not subdued, but simply suppressed, and therefore he can bear evacuations not only without prejudice, but with the most decided advantage: *at the middle* period of such cases the strength has been affected by the continued excitement, and therefore depletion should be proportioned to the change induced; and as *towards the end*, the vital powers are prostrate by the progress of the disorder, general bleeding, and indeed all copious evacuations are to be avoided as mortal measures.

Opportune and moderate evacuations, together with blisters, will generally arrest cases combined with the sub-acute kind of inflammation; and where they are not likely to succeed, calomel should be given as a salivant, in the mode afterwards to be particularly specified. On numerous occasions I have seen an evident improvement in visceral inflammations from the time that ptyalism took place; in fact very few inflammatory cases have proved fatal in my practice, where it was decidedly induced. But to expect that this expedient should be uniformly successful would be highly unreasonable; since we find other remedies, and those the most approved, sometimes utterly fail in such affections.

When the practitioner is early called to any case combined with the acute kind of inflammation, he must come not only armed with the lancet, but with the determination to employ it most decisively. The patient should always be bled at the commencement until he is faint; and if this treatment should not afford a marked relief, the operation should be carried to the same extent, at the lapse of an hour. Nay, it is generally best to stay with the patient half an hour after the first bleeding to be fully assured of its effect; and if in that short interval, there be not an abatement of the pain and of the fever, the venesection should again be used without further loss of time. In such urgent examples every moment is most precious, for they gather an accumulating force from delay. By pursuing, however, the plan above mentioned, I have seldom had occasion to have recourse to the lancet more than twice; but then purgatives have been promptly and vigo-

rously exhibited, and these have often been aided by local bleeding, blisters, and repeated doses of calomel. In both the moderate and extreme cases of the common continued fever, local blood-letting is generally beneficial; but as a deep and permanent impression can only be made by operating through the heart on the whole system, it generally should be preceded by venesection. That step having been taken, the sooner leeches, or scarification are employed the better, provided there be any remains of pain or tenderness over a vital region. It is commonly after this sort of double depletion that I have recourse to blisters in inflammatory fevers: under such circumstances they are sometimes highly useful; but frequently excite the general circulation to a dangerous degree when applied before evacuations of blood. But desirous to give a more particular illustration of the pathology and treatment of the most usual forms of this disease, some fatal as well as favourable cases shall now be adduced.

A stout young man, who was a farmer, had been exposed to a hot sun while ploughing in the middle of the day; and in the evening he rode several miles in a heavy shower of rain. He felt chilly, and passed an uncomfortable night, though he had some sleep. On the following morning he complained of great weight and uneasiness in his head, and became delirious the next day; the pulse being then sharp and frequent, the skin very hot, and the eyes not only red but intolerant of light. The pupils sometimes contracted and dilated with great rapidity; an appearance not unusual in excessive determinations of blood to the brain. The tongue was white and dry in the middle; the respiration hurried; the belly bound; and the stomach flatulent. Retching invariably occurred when the head was raised from the pillow. About sixteen ounces of blood were drawn from the arm twenty-four hours after the development of the fever; and as soon as the bowels had been freely opened, some leeches were applied to the temples, and a blister was placed between the shoulders. No benefit resulting from these measures, he was subjected to the tepid affusions three or four times, but without any obvious relief of the symptoms. The head was next shaved, and co-

vered with cold wet cloths, and the cathartic plan more vigorously pursued. Still there was no amendment; on the contrary the patient grew worse and gradually sinking into a coma, died in convulsions early on the sixth day of the disease. On examining the body after death, the pia-mater exhibited strong marks of previous inflammation, there were many bloody points on cutting into the substance of the brain, but both the thoracic and abdominal viscera appeared natural, except that the gall-bladder contained much dark bile. The cerebral inflammation was here manifestly of the acute kind, and this was the cause of the rapid and mortal termination. In reviewing this case, there are two circumstances to be regretted: the first, that medical advice was not obtained until the fever had existed at least twenty-four hours; and the second, that evacuations were not carried to a sufficient extent when it was obtained. More blood should have been abstracted at first, and the operation, perhaps, repeated at the end of an hour; while the purgatives ought to have been conjoined with active mercurials. Repeated experience has taught me, that nothing but the most decisive measures, at the commencement, can afford the probability of success in similar examples.

After having bathed twice in the sea on the same day, a pale and rather spare youth, was attacked with head-ache, and feverish symptoms. An emetic and an aperient were administered, and seemed to give some relief; but on the following day the skin became hotter than before, and the head-ache more urgent. Cathartic medicines were prescribed in the morning, and sudorifics towards night, with the tepid affusions. Under this plan, the disease seemed to be somewhat checked for five or six days; but shortly the fever again increased, and the patient expressed alarm lest he should fall whenever lifted out of bed, and he was also averse to light as well as noise. He now for the first time occasionally vomited his medicines and food, and complained of an uneasiness under the false ribs of the right side. Twelve leeches were applied to the temples and the same number to the right side, with a blister to the epigastric region; and purgatives with

alteratives were freely administered. But the bowels were now moved with great difficulty, and notwithstanding, no ptyalism was produced. The pulse continued to rise daily; a low muttering delirium came on; and soon afterwards slight squinting with double vision. At last the heat of the skin began to decline, first on the extremities, and then on the trunk. The patient lay moaning upon his back, with an immoveable pupil, and a slow, deep, and interrupted respiration: in this state he expired, in the beginning of the third week after the attack. On discretion, the pia-mater showed distinct signs of inflammation; and about three ounces of serum were in the lateral ventricles. The viscera of the thorax appeared natural, but traces of what are usually called increased actions remained on the liver and intestines. This was a case in which the inflammation of the brain and of the abdomen assumed the sub-acute character; and it was therefore more protracted than the preceding. It is perhaps difficult to say, what might have been the result of a more vigorous plan at the outset; but I have certainly since seen similar instances, which were successfully conducted by early bleeding, promptly followed up by purgatives, with alteratives, and blisters.

An athletic man, aged thirty years, fell from a boat into the river; and though taken out almost immediately, remained some time in his wet clothes. He became very languid, felt great feebleness of the lower extremities, and had a strong shivering fit, on the abatement of which a violent re-action of the heart and arteries succeeded. What he now chiefly complained of was a violent throbbing pain in the forehead, accompanied with load and sickness of the stomach, and with some uneasiness in the site of the liver. The pulse was hard and strong, the tongue white, and the breathing anxious; and to these appearances were added, aching in the eye balls; extreme irritability of the whole body; inflation of the epigastrium; and a dull confused state of the mind, with an evident loss of memory. From the concurrence of symptoms, no doubt remained, that an active inflammation had commenced in the brain or its appendages, combined with an affection of the liver, and perhaps of the stomach. He was therefore bled

from a large orifice, supported in the erect position, until the pulse became a mere thread, and the face pale: syncope supervening he was immediately laid flat upon the bed. About twenty ounces of blood were drawn by measure; and on its separation from the serum, the crassamentum was cupped and covered with a thick buffy coat. The patient continued languid for more than a quarter of an hour, soon after which the fever returned with nearly as violent an excitement as before. As the head had not been so much relieved as might have been expected, twelve additional ounces of blood were abstracted; the patient fainted a second time, but the effect was most decidedly beneficial. A large dose of calomel and jalap was administered, and its action speedily determined to the bowels by repeated draughts of senna, combined with the sulphate of magnesia. These medicines operated copiously, and still further alleviated the symptoms; yet as he had some uneasiness in his side a blister was applied there, and the purgatives daily and freely repeated. By the rapid succession of these active measures, this patient was soon convalescent; but his mouth was sore above a week after his recovery, from the full doses of calomel which he had taken. This case shows very strikingly the great utility of prompt and powerful evacuations. Their speedy influence will not surprise those who have watched and seized that brief period of acute disease, in which depletion is every thing; that brief period which, once lost in doubt and indecision, too often fatally reveals, that human agency is afterwards nothing. The timorous may dread and the speculative rail against such determined depletion in highly acute fevers, but, when used at the very onset, in patients who had been previously well fed, it will generally fulfil the most sanguine expectations; and in such, indeed, its superior efficacy will be firmly established by future experience, when the dreams of theory and the dogmas of authority shall only remain as the vestiges of exploded prejudice and error.

A medical gentleman was seized with an indistinct feverish disease; he was alternately hot and chilly, loathed food, and had a dull uneasiness in his head, with oppression of the præ-

cordia. On the morning of the second day, he took a large dose of calomel with other drastic purgatives, but notwithstanding, he grew much worse towards the evening and my assistance was requested. He then complained of much prostration of strength and of a deep, dull uneasiness in the brain, attended with a sense of fulness and confusion; and the uneasiness was most distinctly felt on shaking the head or bending it forward. That sort of restlessness, which we technically term *jactitation*, in him was very apparent: for if he attempted to lie down in bed he got up again in a few seconds; then sat down upon a chair, and immediately rose, thus incessantly changing his place and position. The surface was hot and dry, the face flushed; the countenance expressive of uneasiness and anxiety; the tongue foul; and the pulse above 120 in the minute, small and hard. Being resolved if possible to make an immediate impression upon the disease, I advised this gentleman to be bled until syncope approached; he readily agreed to the proposal, and accordingly about twenty-five ounces of blood were drawn, when he became faint, and vomited a great deal of crude, sour, and bilious matter. His arm was bound up, and he was laid upon the bed. As soon as he revived he expressed himself most sensibly relieved, and his pulse had become considerably softer, and the skin felt moist. Brisk purgatives were prescribed for about two days longer, when he was completely convalescent; but as a precautionary measure, he adhered to a spare regimen, and took some aloetic pills every night for about a week afterwards. This would have been a serious case, but for the early employment of evacuates; and the patient himself was fully of that opinion after his recovery. Many years before, he had been attacked precisely in the same way while in the Mediterranean. As the treatment at that time was merely palliative in the first instance, he gradually sunk into a low delirium: after having lain some days in a state of insensibility, an active mercurial course was prescribed by a friend; and when his recollection returned, he found himself most completely salivated, and from that period recovered apace.

A tall young man, of dissipated habits, seemed unusually dull for two or three days, but made no complaint except of slight uneasiness in the head; he even pursued his ordinary occupations, and one cold morning in December attempted to amuse himself by shooting along the sea-shore. He came home in the afternoon much fatigued; and about five o'clock was attacked with a cold shivering and felt such feebleness in the lower extremities as to be unable to stand. In about two hours an intense fever followed, which was soon attended by delirium. It was about midnight when I first saw him, and he then raved loudly and incessantly; but there was something peculiar in his frenzy. He suddenly passed from the extreme of joy to that of grief. From inquiry I ascertained that a near relative had died some time ago, and that he had recently been engaged to a young woman to whom he was greatly attached; and it was to the death of the former, and to the excellencies of the latter, that his mind alternately turned. Whenever he mentioned the name of his relative he seemed oppressed with affliction; in a few moments he referred to the other subject, and was apparently in a transport of delight, so strange and incongruous are the associations of a disordered intellect. The pulse was full, bounding, and strong; the whole surface very hot; the face turgid and deeply flushed; the eyes were blood-shot; and the countenance had a wild expression. From the commencement of the excitement, he had complained of an excruciating pain in his head, and of a great load at the stomach; but to all my questions respecting these as well as other points, no answer was returned by the patient; though I observed that he had frequent eructations, and short convulsive twitchings of the upper extremities. The evidences of a very acute inflammation of the brain were here surely most manifest, and the danger was therefore considerable. Without loss of time a vein was opened in each arm; and probably about twenty-four ounces of blood might have been drawn when he became faint. The effect of the operation, thus performed, was superlatively efficacious. There was not only an immediate relief of the more urgent symptoms,

but the rapid abstraction of blood led to a speedy convalescence; nothing more being required than the application of a blister, and an active repetition of purgatives for three or four days. In reviewing the result of these simple, though vigorous measures, it must be recollected that the violence of the vascular excitement had not existed many hours when they were adopted; and it will almost invariably be found, that a morbid action of an acute kind is the more easily reduced in proportion to the shortness of the time which it has existed. Yet it may be observed, that this patient had been slightly indisposed by an uneasiness in the head before the decided attack; and this previous disorder had determined the seat of the topical inflammation, which arose so rapidly in the stage of re-action. On many occasions there are slight local derangements before the occurrence of fever; when they have been but of *brief* continuance they do not materially aggravate the character of a supervening inflammation; but when they have *long* existed before an inflammatory attack, the issue of the latter often is thereby rendered more doubtful.

After having been heated and fatigued, a middle aged woman was exposed to cold, and became rather chilly and restless. For two or three days she complained of load and confusion in the head, but had no fever. While in this state she was thrown into great alarm by the reported death of a relation; and from that period the uneasiness in the head was much augmented, the skin gradually grew very hot; and though she did not vomit, she felt considerable sickness at the stomach. Purgative medicines were now diligently exhibited for five days, but the pain in the head suffered no abatement: on the contrary it was more severely felt, and there were slight wanderings of the mind during the night, with some intolerance of light and noise. On the morning of the sixth day from the developement of the fever, about twelve ounces of blood were taken from the temporal artery, which gave a marked alleviation; the pain of the head, however, again increased in the evening, and about the same quantity of blood was abstracted from a large orifice at the arm. The patient was a

second time relieved, but the symptoms once more returning, though in a lessened degree, it was now determined to apply a blister to the nape of the neck; and to exhibit calomel in large doses during the day, and in smaller ones in the night, that the bowels might be kept soluble, and the system fully saturated. In about four days ptyalism was established, and from that time there was a progressive though a slow recovery. The employment of the lancet was too long deferred in this instance, but it shows that moderate bleeding may be useful at a late period in sub-acute inflammations; and that a combination of the purgative and the alterative plan is highly efficacious after such an evacuation. This case also exemplifies the influence of cold in predisposing to affections of the head; while it demonstrates that mental agitation may be an immediate cause of the common continued fever. One case more and the illustration of this disorder shall be concluded by some general remarks.

A young woman danced so much one evening as to induce copious perspiration, and considerable fatigue. She walked home, and being thinly clothed was drenched with rain. On going to bed she complained of a cold creeping of the skin, and though very weary passed a sleepless night. She vomited her breakfast the following morning, and was then evidently feverish, having an urgent thirst and a hot and dry surface. Some medicines were administered by her friends to make her perspire, and her feet immersed in warm water; but she grew worse, as the day advanced, and the medical attendant of the family was consulted. Finding that she had pain and giddiness in the head, with tense pulse, he took away about ten ounces of blood from her arm, and sent her a brisk purgative. She was somewhat better from these expedients, and had a little sleep on the succeeding night; yet she became worse the next evening, complained more of her head, and showed some signs of an approaching delirium. The fever was now much higher than before, and, having more oppression of the præcordia, she was morbidly sensible as well to light as to noise; and moreover she shrunk from pressure applied to the right hypochondrium. It was at this period

that my opinion was requested; and the surgeon in attendance agreed with me in the propriety of abstracting more blood. She was accordingly bled till she fainted; a blister afterwards applied over the region of the liver; and large doses of calomel exhibited, with other cathartics. On the following day there was less of general oppression and of local uneasiness; but as the pulse still continued quick, and the skin hot, we resolved to unite purgatives and alteratives. Six or eight copious motions were procured daily before bed-time, and small doses of calomel repeatedly administered at night; this plan was pursued nearly a week, when the mouth became sore, and the patient convalescent. In this case the attendant inflammation was seated in the brain and liver; it was checked by the repeated evacuations, and finally removed through the agency of mercury.

The cases just adduced all occurred in subjects belonging to a country district, but many precisely of the same nature have been presented to me in the metropolis, and where the patients had been previously accustomed to nutritious food, and exercise in the open air, they have certainly borne depletion as well as those resident in the country; and it has only been in such as were very sedentary, or very intemperate, or who suffered the privations and anxieties of extreme poverty, that the cautions before inculcated became so essentially necessary. It is common to assert, that the inhabitants of London not only cannot bear evacuations so well as those of the country, but that the same disease in the former often requires a treatment almost opposite to that suitable to the latter. Now with regard to the first part of this proposition it appears to me only true when applied to the most enervated portion of the population of London, since there are immense numbers who resemble in every thing the inhabitants of the country; and with respect to the second part of the proposition it appears to me erroneous, for I have not met with any disease in the metropolis which requires a treatment almost opposite to that which would be proper in the country, though fully convinced that the same principles of cure frequently demand to be modified in their application. The