

and, the attendant surgeon suspecting some latent mischief, I was for the first time requested to meet him in consultation on the case.

At this period, the fever was considerable, and though the uneasiness in the sides was not acute, yet it remained permanent, and was increased by pressure, motion of the body, or a full inspiration. Twenty-four leeches were applied over the integuments of the parts affected, and a brisk saline purgative exhibited. The patient felt somewhat better from this treatment, and the pulse fell to about 138 in the minute, and became rather softer. But, the pain of the sides continuing, twenty-two ounces of blood were taken from a large orifice, in the morning of the 11th, under an impression that an abdominal inflammation still existed. The blood drawn was much cupped, and covered with a thick buffy coat. Two large blisters were afterwards applied to the sides, beneath the false ribs, and extending backwards towards the loins. The patient suffered greatly from the blisters, which were removed and dressed on the 12th, at noon, when the pulse was 120 in the minute. She was much distressed with flatulence and retching throughout this day, and had a laxative enema administered, which relieved the bowels. The internal uneasiness of the sides was rather diminished, not being troublesome when the body was perfectly quiescent, but still becoming so on pressure, motion, or deep inspiration. At bedtime, twelve grains of calomel with two of opium were given in the form of a bolus; the first effect of which was distressing, or, as it was termed by the patient, *overwhelming*, and a profuse perspiration occurred during the whole of the night. But, at an early hour of the 13th, the pulse was only 110 in the minute, and she felt tranquil and relieved, declaring that the last dose of medicine seemed to strike at the root of the disorder. The perspiration continued throughout the greater part of the day. With a view of exciting ptyalism, twelve grains of calomel and three of opium were prescribed in three pills, one of which was exhibited, at intervals of about six hours. She had some hours of sound sleep in the night of the 13th, and felt herself still easy the

next morning, when the pulse was 120 in the minute, and ptyalism obviously existed. The succeeding night was more comfortably passed than any during her illness; and from this time the uneasiness entirely left her sides, so that she appeared quite convalescent by the 23rd of the month, though she was subject to spasms in her legs when she attempted to walk.

On the 25th, the patient had some return of pain in one side, which continued unabated the subsequent day, and was then attended with increased heat of the skin, and hard, quick pulse. We were decidedly of opinion, that it was advisable to bleed again, especially as the strength of the patient had been considerably recruited during her former convalescence. Accordingly about twenty-seven ounces of blood were drawn, the bowels freely evacuated, and another blister applied to the side affected. On the 27th, she considered herself much relieved, and indeed had felt little pain since the bleeding, except in respiring deeply, but she complained of being very weak. Laxatives and the antiphlogistic regimen were continued, and she improved in every respect, until the 1st of March, when the pain of the side again returned, with hot skin and frequent pulse. The warm bath was now tried, but without the least relief. The pain and fever continuing to increase, general venesection seemed once more indispensably necessary, and about twenty-six ounces of blood were abstracted, before a sufficient impression could be made upon the pain and the pulse. Even during the operation, she found herself much relieved, and a warm perspiration broke out after it, which, being encouraged, continued many hours. Dreading lest these repeated attacks of inflammation should leave a tendency to organic disease in the parts which had been affected, we considered it prudent again to prescribe calomel and opium; and ptyalism was a second time moderately established, by the 3rd of the month, from which time to the 9th, the pulse continued to fall, and the pain entirely subsided. There was, however, some threatening of uneasiness in the abdomen on the 10th, but it readily yielded to the operation of a brisk cathartic. From about the last mentioned period, laxatives

and anodynes were alternately administered until the 25th, when the patient was so far recovered as to get into an adjoining room, and soon afterwards was able to ride out in a carriage. On the 21st of April, she was suddenly attacked with an acute pain in the chest, which extended to one of the shoulders, and was increased by a full inspiration. Yet this pain appeared to be entirely spasmodic, for it was greatly relieved by opiates, and soon afterwards wholly subsided, without leaving the least cough, or other symptom of pulmonary disorder. During the remainder of the year, this lady continued tolerably well, though she was not able to bear much exertion. When she had any sensation of returning pain, which was occasionally the case, she generally had recourse to the compound rhubarb pills, and a moderate dose of the Black Drop,* by which she was almost always quite relieved. She also continued to wear a warm plaster on the right side, which seemed the most liable to the return of pain. For some time she was now and then subject to dyspepsia, from which, and an occasional sallownish tinge of the skin, there appeared to be a tendency to irregularity or obstruction of the biliary secretions. On this account, she was recommended to remove to Harrogate, where she drank the sulphureous water with very good effect, though this did not entirely remove the disposition to bilious attacks. By persevering, however, in a light diet, and occasional laxatives, she in a great degree regained her health, and has since continued pretty well.

* The Black Drop was originally prepared, upwards of a hundred years ago, by Edward Tonstall, a medical practitioner of Bishop's Auckland, in the county of Durham, and one of the Society of Friends. The recipe, passing into the possession of a near relative, John Walton of Shildon, who also prepared that medicine, was found amongst the papers of his brother, the late Edward Walton of Sunderland, and by the permission of my much respected friend Thomas Richardson, * senior, of Bishop's Wearmouth, one of his executors, it is here inserted.

* This highly respectable member of the Society of Friends died at an advanced age, since the first edition of this work was published. He possessed the mind of a philosopher, and the heart of a philanthropist.

This case has been selected for the elucidation of the sub-acute inflammations of the viscera, because it is one of the most interesting of the kind that I have witnessed, and because the highly intelligent husband of the patient kept most accurate notes of its progress, from which the foregoing history has been extracted. It must have been perceived, that this lady had a peculiar tendency to inflammation. She was first attacked by an erysipelas, an affection which I have frequently seen followed by some inflammation of the internal parts. She had not recovered from the shock which this gave to her strength, when an abortion took place. The hemorrhage which accompanied this event, appears to have left the circulation in that vacillating, variable state, which not only always succeeds large losses of blood, but which powerfully predisposes to inflammation. In this state she was frequently exposed to a cold and changeful atmosphere, which was the exciting cause of the first attack of abdominal inflammation. When the system is weakened from any cause, but especially from loss of blood, exposure to cold readily occasions congestions about the viscera, which in their turn bring on local inflammation and general re-action of the heart and arteries.

"Take half a pound of opium sliced;—three pints of good verjuice;—one and a half ounce of nutmegs; half an ounce of saffron. Boil them to a proper thickness, then add a quarter of a pound of sugar, and two spoonfuls of yeast. Set the whole in a warm place near the fire for six or eight weeks, then place it in the open air, until it become a syrup: lastly, decant, filter, and bottle it up, adding a little sugar to each bottle."

The above ingredients, agreeably to the experiment of a scientific friend, ought to yield, when properly made, about two pints of the strained liquor; one drop of which he calculated to be equal to three drops of the tincture of opium, prepared according to the London Pharmacopœia, and the effects of its exhibition also tended to shew, that this was perhaps as accurate an estimate as could be made. Probably this compound might be equally well prepared, by a simpler process; and perhaps some other vegetable acid and aromatic might answer as good a purpose as the verjuice and nutmeg. The Black Drop is a most excellent preparation of opium, and highly deserving of a place in our pharmacopœias. From the quantity of acid in its composition, it will often stay upon the stomach when other preparations will not, and as it also affects the head less than laudanum, in the hands of a judicious physician, may therefore be usefully applied.

In the case under consideration, the inflammation was at first perhaps seated in the kidneys, and probably afterwards extended itself to the liver. For more than two days it was marked by little else than uneasiness or pain; but, as the nerves are in some degree the sentinels of life, that warn us of existing or approaching danger, whenever pain or uneasiness continues permanent, even for a few hours, some latent mischief may always be confidently apprehended. When the family surgeon was consulted, with great propriety he had recourse to immediate venesection, and without delay freely evacuated the bowels. This treatment gave some immediate relief; but, in defiance of a brisk purgative, which was afterwards exhibited, the disease advanced insidiously; and in four days more, the pulse rose to 148 in the minute, though the pain was not then very urgent. The local bleeding and purgatives recommended at my instance did not afford much relief, and there seemed then a necessity for the most decisive measures, to save the life of the patient. One full bleeding from the arm, followed up by blisters, calomel, and opium, produced the most signal benefit; and it is worthy of particular attention, that the lady herself considered the ultimate effect of the large dose of calomel and opium peculiarly serviceable. These measures, together with the ptyalism afterwards excited, restored her to a state of convalescence. The comparatively slow progress of the sub-acute inflammation is well revealed in this attack, for had it been of the acute form, the second bleeding would have been inadmissible, instead of beneficial: nay, in all probability, the case would have been fatal before the sixth day, on which it was employed. It deserves, however, to be pointedly stated, especially as the fact has been omitted in the previous detail, that this lady had a degree of uneasiness in the left side, so early as the 3d of February, two days before she felt that dragging sort of pain, which appeared to mark the development of the sub-acute inflammation. In this instance, therefore, the disease had fully existed three days at least before medical assistance was obtained, a loss of time which is always greatly to be lamented on

such occasions; for when a morbid action has been so completely established, it can seldom be at once subdued, and often renders the case more protracted, if not more dangerous than it otherwise would have been.

The second attack of inflammation occurred twenty days after the first, and as it seemed to arise from too stimulating a diet, I had to regret not having sufficiently warned the patient against committing so perilous a mistake. In all inflammations of the viscera, but particularly in those of the sub-acute kind, the diet should be of the most cooling description, long after convalescence has been established: otherwise the topical affection will most probably be reproduced, as actually happened in the case before us. This second attack was more obstinate than the first, and of course required more copious depletion for its removal. From the 7th of February to the 1st of March, the patient lost, by general and local bleeding, upwards of ninety ounces of blood, by far the largest quantity which I ever knew drawn in any case of sub-acute inflammation. This lady considered that venesection and opium were the means, under Providence, to which she principally owed her recovery, and was most sensible of the benefit of the last bleeding. From the long continuance of a quick pulse, and occasional returns of uneasiness in the side, it appeared suspicious whether there was not a threatening of slow organic disease, which is far more liable to follow the sub-acute than the acute form of inflammation. It was partly with a view of guarding against such an occurrence, that ptyalism was induced the second time, mercury being one of the best preventives of structural derangements. In almost all the slight returns of pain which this lady experienced during her final convalescence, she found the most decided benefit from opium, which perhaps has greater powers in preventing inflammation, than has hitherto been acknowledged. There are many inflammatory affections occasioned by the continued irritation of pain, which might often be prevented by an early and judicious administration of opium. Surgeons seem to know the use of this medicine much better than physicians; for by the freely using it after operations causing ex-

cessive pain, they often succeed in warding off serious inflammations.

Acute visceral inflammations sometimes arise from organic diseases; and when this combination occurs, it may often be discovered by tracing the history of the case back for some time, and carefully comparing the past symptoms with the present appearances. The acute attack will generally be preceded by loss of flesh, and some internal uneasiness. But the following examples of this kind may not be wholly useless to young practitioners.

An elderly and married lady had been afflicted several years with what were deemed nervous complaints. She was extremely liable to dyspepsia, was frequently attacked with violent spasms of the bowels, and gradually lost her appetite, flesh, and spirits. When she came under my care, she was considerably emaciated, and had that sallow, faded hue of the face and skin, which is so characteristic of organic affections. She complained of a constant uneasiness in the abdomen, and had occasionally violent pains there for a few minutes. Her pulse was rather quick, her tongue white, and her skin somewhat above the natural temperature. As the bowels were reported to be in a constipated state, I ordered a mild purgative, which however failed to operate, and not only greatly increased the spasms of the intestines, but brought on a distressing sickness. The irritation having been allayed by opiates, another purgative was ventured upon, but it produced the same effects as before; and the lady began to complain of a violent *bearing-down* pain near the naval, as if, she said, there was some resistance in that part to the passage of the feces. Opiates again allayed the distressing symptoms, and on the following day some liquid stool was passed, in which there were small portions of extremely flattened scybala, as if they had been forced through a very contracted aperture. These appearances of the feces, together with the rest of the symptoms, led me to conclude, that there really was a stricture in some part of the intestines. From this time I determined to pursue the palliative plan. But in a short period the patient became considerably worse, and at length had a most decided

attack of enteritis. The only chance of protracting life seemed now to be in moderate, but decided depletion. The patient was therefore bled from the arm till faintness supervened; and this expedient afforded great and immediate relief. The blood drawn was extremely cupped, and covered with the inflammatory crust. Although the bleeding reduced the violence of the inflammation, yet it was obvious from the soreness of the integuments of the belly, the quick pulse, hot skin, and irritable state of the stomach, that some degree of increased action still existed in the bowels. On this account several leeches were put over the surface of the abdomen, and a blister afterwards applied. It was in vain to exhibit other powerful auxiliaries, since nothing but opiates would remain upon the stomach. For some days, however, there seemed a suspension of the inflammation, yet a general collapse gradually came on, under which she at last tranquilly expired. On examining the abdomen after death, the peritonæum and the large as well as small intestines were found considerably inflamed, and thickened in some places. Not far distant from the caput coli, a large tumour was discovered attached to the villous coat, which as nearly as possible blocked up the canal. Both above and below it, the gut was much contracted, and somewhat firmer than natural. This tumour had doubtless been the gradual growth of many years, and, by impeding the descent of the feces, had occasioned all the pain which the patient endured, and finally induced the inflammation which proved mortal. Yet all cases of visceral inflammation, combined with organic disease, are not necessarily fatal, as the annexed will clearly demonstrate.

A married woman, advanced beyond her fortieth year, had been a long time under my care, for chronic enlargement of the liver, and apparently of the right ovary. At one time, there was an indistinct fluctuation in the abdomen, with other dropsical symptoms; but a regular course of calomel and squill not only removed these, but improved the general health of the patient, though it did not remove the enlargement of the parts specified. She was attacked with a cutaneous eruption resembling the nettle-rash, but except from the troublesome itch-

ing which it caused, she conceived that it was very serviceable to her, having had less internal uneasiness since its appearance. The rash receded on exposure to cold, and soon afterwards she was afflicted with pain in the abdominal tumours, which in about two days became extremely severe, and was attended with universal soreness of the belly, and a high fever. The abdominal inflammation now being the most pressing and dangerous symptom, she was bled till she fainted, the bowels were repeatedly opened by full doses of calomel and jalap, and a large blister applied over the abdomen. These means were very useful, yet as some signs of inflammation still existed, calomel and opium were freely administered until the mouth became affected, and from that period she recovered rapidly. This patient had a second and similar attack, which was removed by the same means; but during its continuance, she passed an extraordinary quantity of morbid bile, and was persuaded, that *something*, as she termed it, had burst within her liver, as the tumour in the side from that time was considerably diminished. Since the last illness, she certainly had better health than for some years before, although the evidences of the organic affections were still apparent. The rash returned after each of those attacks; and it has doubtless contributed to arrest the progress of those internal derangements, which at some future period will, in all probability, prove fatal to her. Yet, notwithstanding the inflammation was twice arrested in this case, whenever there is reason to suspect that visceral inflammation is complicated with organic disease, the prognosis should always be most guardedly given; because, in general, patients either immediately sink under the acute disorder, or soon afterwards fall victims to the chronic one. Nothing marks organic disease so well as a continued and progressive course, with loss of flesh and colour, and some quickness of pulse. Whenever patients do not recover as usual after attacks of acute inflammation of the viscera, the most minute investigations ought to be made lest a chronic should have insidiously supervened the acute inflammation; and as such an occurrence may be frequently traced to the too early use of gene-

rous drinks or diets, or to an exposure to a cold and variable atmosphere while yet in a state of weakness, so these should be studiously avoided by patients convalescent from inflammations of the viscera.

Now and then some mechanical obstruction is the cause of inflammation in the bowels, and when that is the case very large injections, thrown up with considerable force, are often of the greatest benefit; but if the obstruction be seated above the valve of the colon, they will fail to remove it, when they cannot be forced beyond that valve, as happened in the following instance. A lady was attacked with symptoms of enteritis attended with a twisting sensation always referred to the same region of the abdomen. All the ordinary measures failed to give relief, and only scanty evacuations were procured of a light clay-colour. Throughout the disease she had vomited bile, but towards its close she rejected much stercoraceous matter by the stomach, which was of a deep yellow; and contrasting this with what had been passed by the rectum, it seemed pretty evident that a fixed obstruction existed somewhere in the intestines. Large injections, among various other measures, were tried, but every thing was ineffectual. On examining the body after death, a rough gall-stone,* about the size of a common walnut, was found imbedded in the villous coat of the bowels, nearly six inches above the valve of the colon. Part of the villous coat forming its bed was eroded, and a surrounding portion of the gut approaching to gangrene, while most of the intestine above was much inflamed, and all beneath natural. It is remarkable that this stone had passed the gall and common duct without rupturing either, and yet stuck in the bowel. The latter had probably been irritated by its pressure, and by contracting upon it, had fixed it too firmly to be removed. Another gall-stone nearly of a similar size was found at the top of the duct, as if it had been about to descend.—Most of the accounts which we possess relative to enteritis are connected with inflammation of its peritoneal

* This stone is in the possession of an esteemed friend, who attended the case with another physician, and myself.