EXTERNAL AND INTERNAL
INFLAMMATIONS.

EXTERNAL AND INTERNAL

INFLAMMATIONS.

In the common systems of nosology, and of the practice of physic, no notice has been taken of the sub-acute forms of visceral inflammation, the descriptions relating to the acute and palpable forms. This has always appeared to me a serious omission, which has probably been the occasion of fatal errors. Many young practitioners are only taught by the loss of patients, that inflammations of the viscera may proceed to a mortal termination, without any of the strong and distinct symptoms mentioned in the methodical compilations of the day, as the constant and indispensable indications of such disorders. The doctrine of an acute, a sub-acute, and a chronic inflammation might be extended to numerous affections of the viscera; but as we are only concerned with the two former species in this place, and as I have given some illustrations respecting the last in a recent publication, the few observations about to be made shall be confined to the treatment of the acute and the sub-acute forms of inflammation.

In regard to the treatment of what are called simple inflammations of the viscera, little more will be required, than to show in what their treatment differs from those complicated with the genuine, contagious typhus. The principal difference in the curative plan lies in this—that in common inflam-

mations, depletion may be carried further in the onset, as they are generally more intense than those complicated with typhus; but in both, the same rules are applicable to the advanced stages when universal collapse is approaching; and in both also evacuations may be advantageously employed at a later period in the sub-acute, than it can possibly be in the acute form. In the beginning of my practice, I used to order about fifteen ounces of blood to be drawn on the accession of any common acute inflammation of the viscera, and the same quantity, two, three, or even four times afterwards, at intervals of six or eight hours each, if the symptoms continued urgent, and the strength of the patient unsubdued. These repeated venesections, together with active purgatives, blisters, and the antiphlogistic regimen, constituted the means on which all my hopes of success were founded. Many cases certainly did well under this the common practice of the time, yet it is only candid to add, that several proved mortal. In investigating the causes of death, by morbid dissections, I discovered that such repeated bleedings sometimes made little or no impressions upon visceral inflammations; and I had previously observed, that venesection in general only succeeded where it had been followed by considerable faintness or by syncope. Reflection upon these facts at length induced me to bleed in the commencement of sthenic disorders, until the patients were about to faint, or until the pulse was rendered very feeble. This method was soon found incomparably superior to the one which had been previously followed, when properly aided by other antiphlogistic measures; and yet on the average, less blood was extracted, because one, two, or at most, three bleedings answered, whereas, under the former mode, the operation had frequently been four or five times repeated.

If it were fair to draw a conclusion from the facts which have come within my observation, I should say, that it is a pretty general error among us, the practitioners of England, to bleed too frequently in the progress of inflammatory affections, and yet without sufficient decision. By drawing blood repeatedly, at long intervals, with regard rather to some pre-

cise quantity than to any immediate and particular effect, the strength of the patient is too frequently exhausted, while the inflammation still proceeds unimpeded to its fatal termination. Yet the efficacy of venesection does not depend upon the quantity of blood drawn, but upon the effect produced. However indecisively the major part of us in this country may recommend the lancet, some late authors of note appear to me to have employed it with too daring a hand, as if the whole chance of recovery was in the abstraction of as large a portion of the vital fluid as possible in a given time. It is difficult, nay impossible, to form any rule, respecting the quantity of depletion, that shall be applicable to all the various examples of particular diseases. Two cases of abdominal inflammation lately came under my care, in which the symptoms were nearly alike. The subject of one of them was a robust man, who on the first day of the attack was bled to the amount of twenty-five ounces, which produced syncope, and for a time apparently arrested the inflammation; but it returned on the following day, when about twenty-five additional ounces were drawn, and with the same effect as before. On the third day, however, the symptoms of abdominal inflammation again became urgent, and forty ounces of blood were now taken away, before faintness occurred: but this last bleeding was effectual, and the patient recovered very well, though slowly on account of the very copious depletion. The subject of the other case was a young lady, neither remarkable for strength nor delicacy. Soon after the first attack, eight ounces of blood were taken away, which produced syncope, and a marked remission of all the symptoms; yet on the following morning, there was an obvious return of the abdominal inflammation, for which about eight ounces more were abstracted. This second bleeding caused a long continued faintness, but on recovering from it, the patient expressed herself completely relieved, and from that time rapidly regained her strength and health. Now here were two instances of an equally alarming nature, one of which required ninety ounces of blood to be drawn for its removal, whereas the other only required sixteen. It must therefore appear evident, that the

imposition of any arbitrary measure is not to be relied on in inflammatory diseases, since the practitioner should be guided by the effect, rather than by the amount of the blood abstracted: and surely if we can make a moderate quantity completedly effectual, it is all the better, as thereby the strength of the patient will be proportionably saved. Yet, on the other hand, we must not be turned from our purpose by unfounded fears about the danger of decided depletion, in cases of extraordinary severity. Half measures are always to be condemned in the commencement of highly sthenic disorders: if they should even break the force of the inflammation, which is hardly to be expected, they will generally leave a subdued degree of it; and thus indirectly lead to chronic derangements of structure, or to serous effusions, if such membranes as the pleura and peritonæum be affected.

It is not perhaps possible to form a correct and general rule as to the time that venesection ought to be repeated in common inflammations. In those of an acute nature, if the first bleeding should not give a marked relief, the second should not be long delayed. It has been customary with me for some time, to wait half an hour, or even longer, with the patient after the operation, to see its full effect, not only upon the pulse but upon the local affection and the general habit. If in that short period, I could not perceive a manifest change for the better, I have generally ordered the arm to be re-bound, and permitted the blood again to flow, until the pulse fluttered beneath the finger, from approaching faintness. And at this second bleeding, when the blood has not issued in a full stream from the orifice first made, I have never hesitated a moment to recommend the opening of another vein, that it might be taken away as rapidly as possible, to induce that temporary collapse of the system, so super-eminently serviceable in all inflammatory diseases. Since I pursued this plan, I have not, upon an average, bled more than twice in the most intense inflammations, nor abstracted, in all, more than about forty ounces of blood, where the case has been under my own management from the beginning. In some instances, however, the quantity has been considerably under, and in others

considerably above this average, as may have been perceived in the two already reported. Where faintness or syncope has occurred after its use, moderate bleedings have appeared to me quite as beneficial as large ones followed by one or other of those effects. But where large bleedings have been followed neither by faintness nor syncope, they have not by any means appeared so beneficial as moderate ones producing either of those states. It may perhaps, therefore, be a desideratum to enquire, whether any new mode could be discovered of inducing faintness or syncope by moderate losses of blood, in inflammatory diseases, that the strength of patients might be saved as much as possible. Under the present practice, we are often compelled to draw considerable quantities of blood by the lancet before we can attain our object: but as I have found on numerous trials that faintness can generally be induced by moderate losses of blood from the application of leeches, so I would recommend this practice wherever it is an object to save the strength of the patient; though in all cases of an urgent nature general venesection should be employed first, and the local bleeding afterwards as a decidedly useful auxiliary. It is a common opinion of the vulgar, that the first bleeding is always beneficial in inflammations. Now it is well known that most persons faint the first time they are bled; and on this account there may really be some foundation for the truth of this opinion. But what has been said about the efficacy of faintness or syncope in inflammatory diseases, must not be extended to those of a truly congestive nature, in which bleeding should hardly ever be continued until such an effect oc-

The quantity of blood which I have ordered to be taken away at once in ordinary acute inflammations has varied from eight to forty ounces. Yet in common, I have seldom extracted less than sixteen ounces at a time, and very rarely more than thirty. Indeed in nine cases out of ten, which have come under my own eye, faintness or syncope has appeared before the last mentioned quantity has been extracted; but then I have always endeavoured to accelerate one of those

I cannot anterite to the barnes authors
of mine are consection as it is not
the peterte of syname use with to profule
and a section of a contain grantify

effects, by the means specified in the cure of the inflammatory typhus. Some authors, I know, coolly talk about drawing fifty, or even more ounces of blood at one time. This certainly may be sometimes done in the acute cases of this country, and often in topical climates, where the excitement of febrile diseases is so impetuous. But, waving all considerations as to its general practicability in this country, such excessive depletion at one time is only justifiable in some extreme cases. On a few particular occasions, I have ventured as far as forty ounces of blood at once, with great advantage to the patient; though I should by no means be partial to this as a general practice. In the course of my experience, I have occasionally observed, that where blood had been so very copiously drawn at one time, it either produced a state of universal collapse, from which the system never rose again,-or was succeeded by indications of violent excitement of the heart and arteries, attended with much nervous irritation. It is also remarkable that on examining the bodies of some patients who had lost great quantities of blood in this way, I found much congestion in the veins of the brain and liver, with more or less effusion of serum in some of the cavities.* Yet a little reflection will easily explain these appearances. When patients are bled to so excessive an amount, as greatly to impair the energy of the heart and arteries, the natural balance between the arterial and venous system cannot be maintained afterwards, and there is consequently a preternatural accumulation of blood in the veins. When bleeding, therefore, is carried beyond a certain point in inflammatory diseases, it may actually occasion a state similar to that which it was intended to remove, though the congestion will be seated in different vessels, and attended with an irretrievable collapse, and sometimes with effusions of serum.

These hints are not thrown out to terrify the medical stu-

dent or practitioner, but to guard him against those extremes, into which the best and wisest men are sometimes liable to run. The experience of every year, convinces me more and more of the great superiority of promptly applying decided measures in the beginning of acute diseases, instead of wasting the most precious moments in feeble, secondary, and often renewed attempts, which generally end in the disappointment of the physician, and the death of the patient. All the most efficacious means should then be made to bear directly on the disease in a short time, and afterwards the mildest measures should be adopted, that nature may be allowed to renovate chiefly by her own powers. Bleeding general and local is certainly the first in the order of remedies, and purgatives the next. When these have produced their influence, blisters near the part affected, and the speedy saturation of the system by calomel, combined with opium, will mostly complete the cure. The united or successive impulses of a few powerful agents such as these, will not weaken the patient more than may be absolutely necessary for the reduction of the inflammation, provided they be not carried further than prudence, or the exigency of the case may require. In many instances, it is indisputably as dangerous to push depletion too far, as to stop too short in its employment. There is indeed a line to be observed on all occasions between these two extremes, and that physician will be the most fortunate, who has the discernment and firmness to draw it with a correct and steady hand.

Some practitioners hesitate about bleeding in the very onset of acute visceral inflammations, deceiving themselves with the vain expectation, that such expedients as purging and blistering will finally succeed. And when an alarming increase of the symptoms has awakened them from their delusion, they begin to bleed again and again, till at last exhausted nature sinks as much from an excess of evacuations, as from the original disorder. The loss of many inestimable hours is not to be repaid by such indiscriminate rashness. If the inflammation has advanced far, the tone of the general system will be proportionally subdued, and the medical attendant ought then

^{*} Dr. Seed has recently published, in the first volume of the Medico-Chirurgical Journal and Review, some most interesting experiments on excessive blood-letting, the results of which coincide with these observations, and which, independently of that, deserve the highest consideration.

deliberately to pause as to the measure of depletion; for the life of the fellow-creature committed to his trust may entirely depend upon its being exactly suited to all the delicate relations of the case. Under such circumstances, small general bleedings will at all times be preferable to large ones; and where any thing like a state of collapse may be justly apprehended, local blood-letting and blisters should be preferred. Yet if there be one remedy more calculated than another to repair the ravages made by delay, it is the conjunction of calomel and opium, which will often tend to arrest, if any thing can then arrest, the topical affection. This combination, however, requires to be given with great care at such a crisis. As much calomel ought to be exhibited as will render its speedy influence on the system probable, and as much opium as will restrain it from passing off by the bowels and calm the general irritation. These medicines are not only useful in neglected and protracted inflammations, but also in those cases where depletion may have been carried too far in the first instance, or indeed at any time. They will sometimes bring the system back towards recovery, when it appeared to have lapsed beyond the reach of medical agency.

In common febrile disorders attended by topical inflammations, there are usually three stages similar to those of typhus. The first is marked by a retrocession of blood from the surface, and a consequent congestion internally. This stage, however, is generally of very short duration, and is not in an exact ratio, even as to degree, with the consecutive one of excitement, in which the local pain, quick pulse, and increased heat, are the most conspicuous phenomena. In the acuteforms of inflammation, the stage of excitement is generally of short duration, sometimes terminating in less than twentyfour hours, and seldom exceeding more than three days. Its natural tendency is to produce universal collapse and derangement of structure, which are the most essential parts of the third and last stage, in such affections. It must therefore, be evident, that in all acute inflammations of the viscera, the time is very limited in which decided depletion can either be useful or admissible. This, however, is not the case with

those visceral inflammations, which assume the sub-acute character; for in them evacuations may often be employed with advantage, several days after the commencement of the inflammation. The distinction, then, between the acute and sub-acute varieties of the inflammation, must be of very great practical importance; and it is much to be lamented, that it has been disregarded by systematic writers, whose descriptions and directions have great influence over the young and inexperienced members of the profession. But, in addition to what has been previously advanced, it is hoped that the following case and remarks will contribute to elucidate the pathology and cure of sub-acute inflammations of the vis-

cera. In December, 1814, a married lady, about thirty-seven years of age, had an attack of erysipelas on one leg, extending up to the thigh. It soon yielded to topical bleeding by leeches, to purgatives, and an antiphlogistic regimen, but she remained weak, and being pregnant, an abortion succeeded. Notwithstanding, the patient exerted herself in getting abroad in the following month, though the weather was often very cold. On the 5th of February, 1815, she complained in walking of an uneasy sensation in the left side of the abdomen, which she described as a sort of dragging pain. Next day this uneasiness extended to both sides, and also round to the back, the urine being passed with considerable difficulty. The symptoms not abating, the family surgeon was consulted on the 7th, who apprehended that there was a tendency to inflammation, and therefore took away ten or twelve ounces of blood from the arm, which greatly relieved the pain in the back, though not the uneasiness of the sides. A calomel bolus was afterwards administered, followed by the sulphate of magnesia, which freely evacuated the bowels, and brought away some scybala. The last mentioned cathartic was repeated on the 8th, and an action still maintained on the bowels; but on account of a disposition to nausea, the effervescent draughts were substituted on the following day, and an opiate given at bed-time. The pulse, which had previously raged from 90 to 120 in the minute, rose on the morning of the 10th to 148,