

If we advance from symptoms and dissections, to inquire into the opinions and practices which have prevailed among the experienced, and into the effects of the various measures employed, we shall still be induced to conceive, that the plague, in its aggravated aspects, is inflammatory or congestive. It has been the custom in Asia, from time immemorial, to bleed in this distemper. Oribasius, the friend and physician of Julian the Apostate, mentions particularly, that being himself attacked with the plague when it raged in Asia, he scarified his leg on the second day, and abstracted two pounds of blood; and adds, that this method not only succeeded in himself, but also in several others.* If then the plague were really a disease of debility, as many modern theorists have contended, how could it be cured by copious depletion? Had blood-letting been directly detrimental, it would, indubitably, have been abandoned ages ago in the East; but we have the authority of Dr. Russel for stating, that it was still universally practised in his time by the Asiatic physicians, though more sparingly than was advised by Oribasius. Nay, he most satisfactorily proves, by numerous cases, that, under various circumstances of the plague, venesection may be safely and even advantageously employed; and he successfully combats, on the ground of his own experience, some objections which have been urged against its causing or increasing a depression or sinking in the pulse. This physician, however, seems to have followed the plan of the Eastern practitioners, having seldom taken away more than eight or ten ounces of blood at once: but is there not reason to believe, that this evidence would have been more decided and favourable, if he had used the lancet more liberally in the first stage of the disease? The abstraction of eight or ten ounces of blood

Pearson, it is hoped that he will make due allowance for the liberties which have been taken with his ingenious tract relative to the plague. The vital importance of the subject has compelled me to differ freely and openly from him in a matter of opinion, but I shall not, hereafter, the less respect his superior talents and attainments as a physician.

* See page 16 of the fourth Edition of Dr. Friend's history of Physic, before quoted.

would occasionally stop the progress of some of the highly acute fevers of Great Britain; but as such a mode would most frequently fail, in the violent cases, it might, if commonly adopted, afford arguments, to ingenious men, against the propriety of venesection, even in such disorders. From the most accurate accounts, it appears that the plague is usually more highly inflammatory or congestive than any idiopathic fever of this country, at least it is manifestly more so than typhus; and therefore it may be fairly argued, that it would often require greater depletion for its cure. The best informed authors agree, that the danger in the plague does not depend upon the glandular affections; and if it does not depend upon visceral inflammation or congestion, upon what does it depend? It cannot for a moment be allowed, that the danger proceeds from pure debility, because invigorating measures do not succeed, and because, whenever depletion has been early and decidedly tried, its effects have commonly been very beneficial. Sydenham quotes no less than fourteen authors of great note, who recommend blood-letting, while he himself speaks of its efficacy in the warmest terms, and does not hesitate to consider the plague, like erysipelas, a most inflammatory affection.* Dr. Mead not only advises venesection, but declares that we must draw blood with a more liberal hand than in other cases, if we are to expect success from it in this complaint.† Two of the most remarkable and at the same time similar evidences, in favour of copious bleeding in the plague, are to be found recorded, the one in Dover, and the other in Sydenham. Both shall, therefore, be cited in the words of the authors.

"The plague," says Dover, "begins as all other fevers do, with intermissions of heat and cold; the symptoms are higher than in any other fever; intense thirst, violent vomiting, pains in the head, back, joints, and all over the muscles; a total failure and prostration of all strength and ability.

* See page 80, 81, 85, 86, of the edition of Sydenham's Works, before quoted.

† See p. 95, of the Edition of Dr. Mead's Works, before quoted.

"The appearances, which come on in a few hours, are what we call *petechiæ*, or black spots, with a buboe or inflammatory swelling in the groin, or some other of the emunctories. This disease is very soon at a crisis, in three or four days at farthest, but generally sooner.

"When I took by storm the two cities of Guaiquil, under the Line, in the South Seas, it happened, that not long before the plague had raged amongst them. For our better security, therefore, and keeping our people together, we lay in their churches, and likewise brought thither the plunder of the cities. We were very much annoyed with the smell of dead bodies. These bodies could hardly be said to be buried: for the Spaniards abroad use no coffins, but throw several dead bodies one upon another, with only a draw-board over them; so that it is no wonder we received the infection.

"In a very few days after we got on board, one of the surgeons came to me, to acquaint me, that several of my men were taken after a violent manner, with that languor of spirits, that they were not able to move. I immediately went among them, and, to my great surprise, soon discerned what was the matter. In less than forty-eight hours we had in our several ships, one hundred and eighty men in this miserable condition.

"I ordered the surgeons to bleed them in both arms, and to go round to them all, with command to leave them bleeding till all were blooded, and then come and tie them up in their turns. Thus they lay bleeding, and fainting so long, that I could not conceive they could lose less than an hundred ounces each man.

"If we had lost so great a number of our people, the poor remains must infallibly have perished. We had on board oil and spirit of vitriol sufficient, which I caused to be mixed with water to the acidity of a lemon, and made them drink very freely of it; so that notwithstanding we had one hundred and eighty odd down in this most fatal distemper, yet we lost no more than seven or eight; and even these owed their deaths to the strong liquors which their messmates procured for them.

"They had all spots, which in the great plague they call

tokens; few or none of the Spaniards escaped death that had them; but my people had them, and buboes too.

"Now if we had recourse to Alexipharmicks, such as Venice treacle, diascordium, mithridate, and such-like good-for-nothing compositions, or the most celebrated Gascoin's powder, or Bezoar, I make no question at all, considering the heat of the climate, but we had lost every man."*

Sydenham observes, "Amongst the other calamities of the civil war, that severely afflicted this nation, the plague also raged in several places, and was brought by accident from another place to Dunstar castle in Somersetshire, where some of the soldiers dying suddenly with an eruption of spots, it likewise seized several others. It happened at that time that a surgeon, who had travelled much in foreign parts, was in the service there, and applied to the governor for leave to assist his fellow-soldiers who were afflicted with this dreadful disease in the best manner he was able; which being granted, he took away so large a quantity of blood from every one at the beginning of the disease, and before any swelling was perceived, that they were ready to faint and drop down; for he bled them all standing, and in the open air, and had no vessels to measure the blood, which falling on the ground, the quantity each person lost could not of course be known. The operation being over, he ordered them to lie in their tents; and though he gave no kind of remedy after bleeding, yet, of the numbers that were thus treated not a single person died; which is surprising. I had this relation from colonel Francis Windham, a gentleman of great honour and veracity, and at that time governor of the castle."†

From these curious narratives it appears, that the patients were not only bled very early in the plague but till they either actually fainted, or till they were on the point of fainting; two circumstances of the utmost importance in the cure

* See p. 167, 168, 169, of Dr. Beddoes' Researches, Anatomical and Practical, concerning Fever as connected with Inflammation, where the above passage is quoted at length from Dover's Ancient Physicians' Legacy.

† See Swan's Sydenham, p. 87, 88.

of highly acute diseases of an inflammatory nature, as the above examples of the plague appear to have been. Though such a practice would be exceedingly censurable if applied in the same rash, indiscriminate way in every case of plague, yet it is an instance of that *experimentum periculosum* which when once past, has often been so useful in physic, by showing us the good or bad effects of extraordinary measures; and since indeed nearly all the knowledge which we possess in regard to remedies has been derived simply from experiment, these facts may at least embolden us to discard our false fears about debility, and to bleed in the plague as we would in any other acute affection, with those precautions which the variety and stage of the disease, as well as the age, habits, and constitution of the patient may require. But as we have so many examples of the great efficacy of early bleeding in the plague when used without other subsidiary means, so we might reasonably hope that our success would be still more generally certain, if we united the agency of purgatives, and perhaps of alteratives at the same time. Mr. Price, in an interesting Narrative of the Plague as it appeared in Egypt, has given decided evidence in favour of the persevering employment of repeated doses of calomel and jalap, until full evacuations were induced, and the fever abated; for though he cannot precisely state what proportion of his patients recovered, yet his recoveries far exceeded the ordinary ratio, and as the character of the disease was severe, the success is fairly referrible to the method of treatment. The diet was made strictly antiphlogistic, and the patients were frequently washed all over with warm vinegar and water, both of which adjutants would be unquestionably useful, as much febrile excitement seems to have been developed.*

If we impartially investigate the histories of the plague, as it has prevailed at different times, we shall almost uniformly

* See, in Appendix II. p. 46, of the Fourth Edition of Dr. Hamilton's Observations on Purgative Medicines, a Narrative of the Plague in Egypt 1801; In a Letter addressed to the Author, from John Price, Esq. Deputy Purveyor to the Forces.

find, that the cordial plan of treatment has been attended with the most disastrous consequences in severe cases; and, contrasting these with the good effects repeatedly produced by opportune and free depletion, it will surely be admitted, that we ought not now to be deterred from giving the latter method the fairest and fullest trial, because half-measures have so often failed, or because the modern doctrines of debility have paralysed the right arm of many European practitioners. Indeed it will be evident to every attentive observer, that in those violent forms of the plague, which terminate in a very short time, the purely stimulant treatment cannot possibly be of essential service; partly on account of its general inefficacy in the beginning of all acute fevers, and partly on account of the dangerous character of the particular disease. To neglect therefore so powerful a remedy as depletion, in such cases, is in effect, to leave the unfortunate patients to struggle unassisted with their fate; like those inhabitants of certain countries in the East, who are said to be deserted by their brethren in the extremities of age and sickness. But it may be presumed, that the example which some practitioners have so successfully set, as to the treatment of the yellow fever, will be followed by those who may hereafter witness the plague; and we shall then probably find, that the latter disease, like the former, will cease to be generally fatal, when the palliative plan is abandoned for decisive measures at the commencement. If the suggestion of so humble an individual as myself were deserving of notice, I would earnestly recommend, that the British Government should form a society for the express purpose of investigating the prevention, nature, and treatment of the plague; or, not being deemed expedient as a State measure, that it should be established by public contribution. Such an institution would be worthy of the country which extends its genius and benevolence to all parts of the world; and the remembrance of it might remain with posterity, when our national greatness and glory shall have passed away, like those of Greece and Rome. Through it perhaps another Jenner might be found to disarm even this human scourge of its virulence; or if it did not lead to so

great a discovery, at least the morbid derangements which the plague induces in the vital organs might be more extensively ascertained, and the power of an early and active treatment put to a competent trial. In the ordinary treatment of this disease, it is clear that the means are not at all fitted to the end proposed. There is no natural relation between the inertness of the remedies, and the violence of the symptoms. We might as consistently attempt to stop an impetuous avalanche by a common reed, as to arrest the worst forms of the plague by mere palliatives. The dissections upon record, collectively taken, indicate decidedly, that visceral inflammations or congestions are the causes of death; and when we have found other visceral inflammations and congestions yield to judicious measures, shall we continue to deem those of the plague alone incurable? Shall we still supinely view this disease, like the superstitious Mahometans, as if it were beyond the reach of human power? Shall we still persist in lulling ourselves into a fatal delusion, by believing that nothing can be done, but to palliate the symptoms? It is surely unworthy of the enlightened age in which we live, to profess that the violence of any disorder is a sufficient reason for not attempting effectually to arrest its progress: such a notion is only calculated to deaden the best sensibilities of our nature, and to extinguish that ardour of investigation which this, like many other subjects in medicine, most imperiously demands.

It is in the beginning of highly acute fevers, probably not excepting the plague itself, that time is of such inestimable value; for there are then truly critical moments, which, if promptly seized, and judiciously employed, enable the practitioner to control the most untoward symptoms, and to prove that the medical art, with all its imperfections, is possessed of the most extraordinary powers. But if by any chance this golden opportunity be lost, the best directed efforts will generally fail to check the ravages of such disorders, which gather force as they proceed, and soon become uncontrollable, by causing irreparable derangement of function and structure. If the plague has hitherto proved generally destructive, it is

probably not because it is in itself actually irremediable, but because proper expedients have not been opportunely applied. From the facts on record, and from the general analogies which obtain in febrile diseases, it is probable, that the simple and the inflammatory forms of the plague might be as successfully encountered as the simple and the inflammatory forms of typhus, and by the same means; for however the plague may be marked as a specific disease by peculiar symptoms, namely the bubo and carbuncle, still the common effects of its cause seem to be precisely similar on the internal organs, when the febrile excitement is fairly emerged; but the congestive form of the plague, happily the most rare, appears to be even more overpowering than that of typhus, and therefore perhaps for it some correspondent modification of treatment may be found necessary. This disease being the only one in the volume concerning which I have spoken without positive experience of my own, these desultory hints are merely intended to awaken inquiry on the subject; yet as the cure of most other acute diseases has been considerably simplified and improved in our times, so one cannot but hope, that an application of common principles to the plague will be followed by highly favourable results.

An ingenious author, Dr. Maclean, has lately endeavoured to show, that the plague is not a contagious disease. In this opinion he has been anticipated and joined only by a few, while there is a vast body of authentic evidence on the other side, among which is included that of Sydenham. It is well known, that Sydenham, like Hippocrates, referred, the origin of most fevers to the atmosphere, but so great was his veneration for nature, that a favourite hypothesis could not bias his mind on matters of fact, and he has therefore expressly affirmed, that the plague is contagious, from the firm conviction of his personal observation. It is a curious circumstance, too, that he states the plague to have regularly prevailed in England about once in forty years; and to what cause, but the quarantine laws, can we attribute our long exemption from the malady since his time? Sydenham was, however, aware that the condition of the atmosphere influenced the rise and

decline of the plague, as it influences those of the small-pox, which is known to be contagious. Dr. Maclean has asserted with equal confidence, that typhus is not contagious, but so far from having defined what he means by typhus, he has evidently mixed it up with the ordinary fevers of this climate which are not contagious, as if fevers had not peculiar as well as common symptoms; and I more than suspect, that he has fallen into a similar error concerning the plague, for under that term he appears not only to have included the disease specifically marked by bubo and carbuncle, but the ordinary non-contagious fevers of those countries to which he alludes. In reference to the plague, however, I could only cite the authority of others to demonstrate, that it is a specific, contagious disease; but as I can speak from considerable experience on typhus, I shall feel it my duty hereafter to dissent, in regard to its nature, most decidedly from Dr. Maclean, how much soever I may respect his motives and talents.

THE
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AND
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