

INFECTION AND CONTAGION.

CHAP. X.

INFECTION AND CONTAGION.

INFECTION is designated a febrific agent, produced by the decomposition of animal and vegetable substances. It usually exists in the state of miasm or gas, and, in this form, occurs in filthy houses, ships, jails, hospitals, and cities; and also in marshes, and fenny and low districts of country. Under the denominations of *marsh*, or *paludal miasmata*, *exhalations of the soil*, *vegeto-animal effluvia*, *malaria*, *human effluvia*, *febrile* and *putrid contagion*, its various specific effects are detailed in the works of practical writers, as having a decided influence on the human body.*

CONTAGION is a poison generated by morbid animal secretion, possessing the power of inducing a similar morbid action in healthy bodies, whereby it is reproduced, and indefinitely modified. This contagion can only be known by its effects, and can only be divided into genera by classifying it with the diseases it produces: e. g. 1st, Contagion communicable exclusively by contact, the species of which are as follows: *itch*, *syphilis*, *sibbens*, *loanda of Africa*, *frambesia* or *yaws*, *elephantiasis*, *hydrophobia*, and *small-pox*.† These diseases cannot be conveyed through the medium of the air, but require actual contact. Hence they are strictly contagious, in the etymological sense of the word. 2d, Contagion communicable both by contact and by the atmosphere. These are liable to become epidemic, in contradistinction to those of the first genera. In this the species are, *small-pox*, *measles*, *chicken-pox*, *scarlet fever*, *hooping-cough*, &c.

One of the laws which govern these contagions is, that they are communicable in every season, in the heat of summer as well as in the cold of winter, in a pure as well as an impure air. Another law is, general *insusceptibility* to future attacks of the same disease, but with exceptions.

Many diseases are infectious. Every person ought, therefore, as far as he can, to avoid all communication with the diseased. The common practice of visiting the sick, though often well meant, has many ill consequences. Far be it from me to discourage any act of charity or benevolence; especially towards those in distress; but I cannot help blaming such as endanger their own or their neighbours' lives, by a mistaken friendship, or an impertinent curiosity.

The houses of the sick, especially in the country, are generally crowded from morning till night with idle visitors. It is customary in such places, for servants and young people to wait upon the

* It has erroneously, we conceive, been denied that animal substances have any thing to do in the production of febrific miasmata. An unequivocal proof, however, was lately been exhibited of the contrary opinion, or rather fact, produced by opening a grave in the island of Lenten. See *Med. Chirurg. Review*.

† To these, Dr. Hossack, of New York, adds *influenza*, and *cynancha maligna*, or putrid sore throat, although Dr. Smith, whose modification of Dr. H.'s classification we have given, says, though without proof, that the former is evidently not contagious, and that the latter is either a modification of scarlatina, or an atmospheric disease.

sick by turns, and even to sit up with them all night. It would be a miracle indeed should such always escape. Experience teaches us the danger of this conduct. People often catch fevers in this way, and communicate them to others, till at length they become epidemic.

It would be thought highly improper for one who had not had the small-pox, to wait upon a patient in that disease; yet many other fevers are almost as infectious as the small-pox, and not less fatal. Some imagine that fevers prove more fatal in villages than in great towns, for want of proper medical assistance. This may sometimes be the case; but I am inclined to think it oftener proceeds from the cause above-mentioned.

Were a plan to be laid down for communicating infection, it could not be done more effectually than by the common method of visiting the sick. Such visitors not only endanger themselves and their connexions, but likewise hurt the sick. By crowding the house, they render the air unwholesome, and by their private whispers and dismal countenances, disturb the imagination of the patient, and depress his spirits. Persons who are ill, especially in fevers, ought to be kept as quiet as possible. The sight of strange faces, and every thing that disturbs the mind, hurts them.

The common practice in country-places, of inviting great numbers of people to funerals, and crowding them into the same apartment where the corpse lies, is another way of spreading infection. The infection does not always *die with the patient*. Every thing that comes into *contact* with his body while alive, receives the contagion, and some of them, as clothes, blankets, &c. will retain it for a long time. Persons who die of infectious disorders ought not to lie long unburied; and people should keep as much as possible at a distance from them.

It would tend greatly to prevent the spreading of infectious diseases, if those in health were kept at a proper distance from the sick. The Jewish Legislator, among many other wise institutions for preserving health, has been peculiarly attentive to the means of preventing infection, or *defilement*, as it is called, either from a diseased person or a dead body. In many cases the diseased were to be separated from those in health; and it was deemed a crime even to approach their habitations. If a person only touched a diseased or dead body, he was appointed to wash himself in water, and to keep for some time at a distance from society.

Infectious diseases are often communicated by clothes. It is extremely dangerous to wear apparel which has been worn by a person who died of an infectious disease, unless it has been well washed and fumigated, as infection may lodge a long time in it, and afterwards produce very tragical effects. This shows the danger of buying at random the clothes which have been worn by other people.

Infectious disorders are frequently imported. Commerce, together with the riches of foreign climes, brings us also their diseases. These do often more than counterbalance all the advantages of that trade by means of which they are introduced. It is to be regretted, that so little care is commonly bestowed, either to prevent the introduction or spreading of infectious maladies. Some atten-

tion indeed is generally paid to the plague; but other diseases pass unregarded.

Infection is often spread through cities, by jails, hospitals, &c. These are frequently situated in the very middle of populous towns; and when infectious diseases break out in them, it is impossible for the inhabitants to escape. Did magistrates pay any regard to the health of the people, this evil might be easily remedied.

Many are the causes which tend to diffuse infection through populous cities. The whole atmosphere of a large town is one contaminated mass, abounding with various kinds of infection, and must be pernicious to health. The best advice that we can give to such as are obliged to live in large cities, is to choose an open situation; to avoid narrow, dirty, crowded streets; to keep their own house and offices clean; and to be as much abroad in the open air as their time will permit.

It would tend greatly to prevent the spreading of infectious diseases, were proper nurses every where employed to take care of the sick. This might often save a family, or even a whole town, from being infected by one person. We do not mean that people should abandon their friends or relations in distress, but only to put them on their guard against being too much in company with those who are afflicted with diseases of an infectious nature.

Such as wait upon the sick in infectious diseases, run very great hazard. They should stuff their noses with tobacco, or some other strong-smelling herb, as *ruë*, *tansy*, or the like. They ought likewise to keep the patient very clean, to sprinkle the room where he lies with vinegar or other strong acids, frequently to admit a stream of fresh air into it, and to avoid the smell of his breath as much as they can. They ought never to go into company without having changed their clothes and washed their hands; otherwise, if the disease be infectious, they will in all probability carry the contagion along with them.

However trifling it may appear to inconsiderate persons, we will venture to affirm, that a due attention to those things which tend to diffuse infection would be of great importance in preventing diseases. As most diseases are in some degree infectious, no one should continue long with the sick, except the necessary attendants. I mean not, however, by this caution to deter those whose duty or office leads them to wait upon the sick, from such a laudable and necessary employment.

As a disinfecting agent, either of the following simple and easily obtained fumigations, may be carried at least once a-day through the apartments of the sick; or for the purpose of fumigating apartments where sick people have been lodged:

Take nitrate of potash, (nitre,) four drachms.
Sulphuric acid, (oil of vitriol,) two drachms.

Place them in a saucer upon hot sand;

or,

Take muriate of soda, (common salt,) three ounces.
Black oxide of manganese, one ounce.

Sulphuric acid, one ounce.

Water, two ounces.

Mix the three first ingredients, and pour in the water gradually, when visible streams of gas will be elicited, capable of destroying the contagious effluvia generated in the apartment, or about the furniture, bed-clothes, &c. The saucer, or other earthenware vessel, containing either of these, may be placed in the middle of the room, observing to have, during its use, the doors and windows closely shut.

In a conversation with the late Sir John Pringle, for whom I had a great regard, he expressed some apprehension that the contents of this chapter might deter people from attending their friends and relations in fevers. I told Sir John that was the very evil I meant to cure, having always found the country-people too apt to visit their friends and neighbours in fever, even so as to crowd the house, and incommode the sick. Nor could I impute this to humanity, but to an inquisitive disposition to learn what was likely to be the patient's fate, and to ask improper questions of those about him, or of the doctor himself, were he weak enough to answer them. In this case, his answer would be sure to come back to the patient, and if unfavourable, greatly magnified; so strong is the inclination which some men feel to spread terror, even at the risk of another's life.

Sir John, not having practiced in the country, was not immediately struck with the force of my reasoning, till I told him what had happened to a family of his own name who lived near Edinburgh, who had nearly all perished in a fever. The family consisted of a father and mother, with nine or ten children, most of them grown up and in place. The mother was seized with a fever of the putrid kind, and the children came in turns to nurse her. They all caught the fever: some died; and others narrowly escaped with their lives. The evil did not end there. They carried the fever into the families where they lived, and spread the infection far and wide. This I have often known to happen in the country, and would advise masters and mistresses never to suffer their servants to act as nurses or attendants on the sick, even though the latter should be their nearest relations. They had much better hire nurses, than allow their servants to act in that dangerous capacity.

CHAP. XI.

AFFECTIONS OF THE MIND.

MENTAL AFFECTIONS have great influence both in the cause and cure of diseases. How the mind affects the body, will, in all probability, ever remain a secret. It is sufficient for us to know, that there is established a reciprocal influence between the mental and