

well known, that in their strugglings their saliva is often thrown upon their hands and faces. And yet notwithstanding this, he is of opinion that the disease may be communicated, by a diseased subject *breathing into the mouth of a healthy person*, or by the saliva applied to the mouth or lips, either immediately or by the intervention of food or other matters infected with the virus. These opinions he supports by instances related by some of the older medical writers; but the arguments he has above employed against the opinion, that the saliva simply applied to the skin of a healthy animal, is capable of producing the disease, should seem to hold equally good against these. But it is still probable that the lips and internal surface of the mouth, being what may be styled *intermediate surfaces*, to distinguish them from what Mr. Hunter has called *secreting* and *non-secreting* surfaces, may be susceptible of the action of the virus.

When the poison is communicated in this latter way, the disease is believed to appear generally within six or seven days, and sometimes earlier. M. Portal mentions an instance from Morgagni, of a child that was bitten in the mouth, and in whom the disease did not break out till forty days after; but in this case the disease appears to have been received by a wound.

When the poison is taken up from a wound, the effects are much later in making their appearance, often forty days and upwards; and if we put confidence in authors, this period must be extended to five months, to a year, to six years, to ten, to eighteen, to twenty! But M. Portal is inclined to suspect some of these have been cases of spontaneous hydrophobia, or that the patients had contracted the disease at a subsequent period in some other way.

The violence of the disease, and the time of its appearance, depend, according to M. Portal, rather on the state of the patient, than the number or largeness of the wounds; or the kind of animal. In the irritable and melancholic it shews itself soonest, and affections of the mind are frequently the occasional cause of its appearance.

In treating of the seat of the disease, our author adopts the opinion of Democritus, that the nerves are the parts principally affected. The shiverings, the smallness and inequality of the pulse, the continual recurrence of the mind to one object, and the cramps which precede its attack, are symptoms, he observes, common to nervous diseases. The heats which succeed the shiverings in different parts of the body

are observable in nervous fevers, and the sensations of light and of sounds which they seem to perceive in silence and in darkness, arise, he thinks, from excessive irritations of the optic and auditory nerves.

After explaining, in a very satisfactory manner, the different symptoms, our author proceeds to the mode of treatment. He recommends the application of butter of antimony (antimonium muriatum of our new dispensatory) to the wound, as preferable to any other caustic; and the application of five or six leeches around the wound, which is to be afterwards covered by a blistering plaster, and the discharge kept up for forty days. A dram of mercurial ointment is to be rubbed in round the wound, and two drams every day in some other part, till marks of a salivation appear, when the quantity of ointment is to be diminished, and only so much rubbed in, as is just sufficient to keep up a slight spitting. In case the poison has been introduced by the mouth, the ointment is to be rubbed in successively on different parts of the body. The patient is to go into a warm bath every morning, and to stay in an hour, and on coming out the frictions are to be administered. Previous to this course of bathing, the patient is to take an emetic, on the day after the application of the leeches. M. Portal recommends also the use of antispasmodics. R. camph. & nitr. $\mathfrak{a}$ gr. viij. mosch. gr. ij. mel. q. s. ut f. massa in ij bolus dividenda. One of these is to be taken on going into the bath, another on coming out, and the third in the evening. But what are we to expect from antispasmodics in such doses? By the use of these means, says M. Portal, the result of observation will justify us in the persuasion, that an attack of the disease may be prevented, and that we ought not to despair of their being attended with success, even if the first symptoms should have already made their appearance. In this latter case he advises the patient to be bled in the foot, to have clysters of infusions of antispasmodic substances, with twenty drops of eau-de-luce, to rub in daily half an ounce of mercurial ointment, to bathe several hours every day, and to take, if possible, antispasmodic bolusses, and draughts; but in what doses we are not told. If these means should fail, the patient is to be bound to his bed*, and to re-

* A practice somewhat less inhuman than that of smothering them between feather beds, which still prevails, M. Portal informs us, in some of the provinces of France, and was not long ago practised in Paris. We trust, for the honour of this country, that it is not frequent with us.