A

MEDICAL DISCOURSE,

ON SEVERAL

NARCOTIC VEGETABLE SUBSTANCES,

READ BEFORE THE

MASSACHUSETTS MEDICAL SOCIETY,

AT THEIR ANNUAL MEETING,

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A MEDICAL DISCOURSE.

The narcotic plants constitute a very important part of the materia medica. The life of the patient often depends on the accuracy of the physician's knowledge of their medicinal effects: it is therefore presumed, that every attempt to extend our information, on this important subject, will be received with candor.

Instead of attempting a regular essay on any one of these medicines, permit me, on this occasion, to offer some miscellaneous, practical remarks respecting several of them, subjoining concise histories of a few cases.

Opium, the most important remedy which the vegetable kingdom affords, claims the first place. Much time has been spent in debating, whether this medicine ought to be classed among the stimulants or sedatives. A particular discussion of this question would be foreign to my present purpose: let it suffice to observe
observe, that if we consult experience and observation, we shall find that medicine, as well as disease, frequently affects the human body in a manner very different from that which is pointed out by the framers of systems:—that Opium may either increase sensibility and action, diminish them, or produce the one effect in succession to the other; that it is capable of increasing action in one part of the body, while it diminishes it in another—of removing morbid actions, while it increases some of those that are natural—of exciting or increasing morbid actions—and of destroying action altogether,

Opium appears naturally to produce, at first, an increase, in some degree, of sensibility and action; and afterwards, in a still greater degree, a diminution of both. From the experiments of Dr. Crumpe, it appears, that given to a person in health, it gradually accelerates the pulse for about half an hour; afterwards, for a longer or shorter space of time, generally according to the quantity given, the pulse is retarded: but such is the variety of operation, produced by the various combinations of natural temperament, state of the system, quantity taken, and other circumstances, that the one or the other of these effects is often scarcely perceptible. In small doses, it appears
pears sometimes to act as a simple stimulant; producing exhilaration, watchfulness, &c. while in large doses, under different, or even the same circumstances, it produces effects directly the reverse, without any perceptible previous excitement. In cases of painful spasms, we commonly find the disease increased, in five or six minutes, even under a dose that will, in twice that time, produce an alleviation. In cases where the dose is insufficient, by one half, to remove the spasms, the effect seems to be the same, as under a full dose, when the time is insufficient by one half; that is, the disease is usually augmented; but with this difference, that, in the one case, the augmentation is only for a very short time; in the other, it becomes, in some measure, permanent. Hence it appears not improbable, that Opium may be exhibited in such doses, and at such intervals, as to aggravate the disease in almost any conceivable degree. How often this may have actually taken place, in practice, cannot be determined: we have histories of some cases of severe spasms, in which physicians have冒险ed to give a grain every hour: in such cases, it is certain that much larger doses may be given, without any effect, except that of increasing the complaint.
In exhibiting Opium as an anodyne, it is of importance that the requisite dose should be given at once, or in as short a space of time as possible. In ten or twelve minutes, it may be ascertained whether the dose given will prove sufficient to afford relief; if not, another ought to be given immediately, and the repetition continued, till a complete relaxation be obtained. Such doses may always be given, at once, with perfect safety, as that any quantity, which the case may require, may be exhibited in the space of an hour.

To exemplify the practice here recommended, I will mention the case of a young lady, aged seventeen, who was seized with excruciating spasms, probably tetanus, the consequence of a rupture of the sartorius muscle. Some slighter symptoms, of a similar kind, had taken place on the preceding day, which had required twelve grains of Opium; that dose was therefore ordered to be given immediately. In ten minutes, finding no abatement of the spasms, twelve grains more were given; and the dose was repeated every ten minutes, till she had taken six doses, or seventy-two grains. This quantity removed the spasms, produced a comatose insensibility, slow, stertorous breathing, and a slow, full pulse. In eight hours, the spasms began to return, and the
the Opium was given as before. A few of the first doses increased the symptoms; but, after she had taken the full quantity, they disappeared. In this manner, and with the same effect, the Opium was repeated, at intervals of eight hours, for three days, when the spasms ceased, and she recovered. During this period of three days, she took nearly eleven drams of excellent Opium, and not a grain more than was absolutely necessary.

In the colicaPictonum, or Devonshire colic, Opium has sometimes been given, for the purpose of obtaining temporary relief: but it does not appear to have been known, that, in a sufficient dose, it is capable of effecting a sure, safe and speedy cure. For many years past, I have not seen a single case of this distressing disease, which has not yielded in about an hour. No preparation is necessary, except the evacuating of the stomach, which is generally done by a spontaneous puking, before we see the patient. The quantity of Opium, which has been found necessary to effect a cure, has varied, from fifteen to forty grains. I never have known the disease to return; nor any disadvantage to arise, from this mode of practice; nor have I ever found any difficulty in moving the bowels, in the course of twenty-four hours, after the removal of the pain.
pain. Although Opium alone will succeed, it is better to join with it a few grains of calomel, in divided doses.

The same mode of practice has been pursued in cholera, and with equal success. A gentleman, of about sixty-five years, was seized with this disease, in so violent a manner, that, when I first saw him, a few hours after the attack, his countenance was cadaverous, his nose and hands cold, the blood had become stagnant around his nails, the pulse was hardly perceptible, and every symptom indicated his speedy dissolution. The severe nausea and puking rendered his stomach unable, for some time, to retain the necessary quantity of Opium; as soon as was practicable, we got down sixty grains, ten of which were returned by vomiting. The quantity retained, soon removed every distressing symptom: gradually, and with difficulty, he recovered his strength.

The Stramonium is another valuable medicine, of the same family. I shall confine my observations, respecting it, to its use in cases of epilepsy. This practice is not new: but it seems not to have been attended to, at least in this country, as it deserves. Epileptic fits, in respect to the use of the Stramonium, may be
be divided into three classes. Those of the first class occur daily, or very frequently. In these cases, after removing worms, acids, and whatever may irritate, the patient is to be kept constantly under the influence of the medicine; for this purpose, he will require, every day, one or two doses, according to the severity of the symptoms. The saturated tincture is the most convenient form for children. The requisite dose may be known by the dilation of the pupils. While the patient is kept in this state, the fits will rarely take place, and the habit of recurring is gradually broken.

In the case of a boy of five or six years old, who had been attacked three or four times, daily, for several months, his senses were so far impaired, that he would devour the most filthy substances, with the same avidity as the most palatable food; after the first dose of the Stramonium, the fits ceased; but the tendency to return made it necessary to continue the medicine for some weeks longer; in process of time, he recovered his reason.

A child, of about three years, was subject to fits; one generally took place every day; they had not, however, been of so long continuance as in the preceding case: by mistake he took the Stramonium in too large a dose;
it produced severe vomiting, convulsions, flupor, &c. which continued through the day: the parents were so terrified, by the effect of the first dose, that they could not be induced to give a second: the fits, however, never returned.

Fits of the second class either recur at regular periods, frequently monthly, or the patient is warned of their approach, by some previous symptoms. In either of these cases, the Stramonium is to be given when we apprehend the access of a paroxysm, and to be discontinued when the danger is past.

All the cases of these two classes, which have been under my care (and the number is not very small) have been cured by the Stramonium, assisted by chalybeates, or such other medicines as particular symptoms appeared to require.

Cases of the third class do not observe any regular period, nor do they give any warning of their approach. They are generally excited by some other disease; or by some irregularity of the patient. In cases of this kind, the Stramonium cannot be used even occasionally, with a prospect of much benefit; and to give it, during a long period, lessens its antispasmodic
modic effects, and debilitates the patient.—I have seen it afford some relief, but never knew it perform a cure.

It has been observed, that a medicine, by being extolled beyond its merits, generally fails of supporting even that degree of reputation to which it is justly entitled. This observation may be applied to the Cicuta; but although it may be incapable of curing cancers, yet it is a very valuable medicine. In cases of a scrofulous affection of the abdominal viscera, it is, perhaps, the best that is known. The use of it is generally followed by an eruption on the skin; which seems to indicate a translation of the disease. A striking instance of this occurred in a boy, of five or six years old. I found him feverish and emaciated: the secretion of urine was small; the abdomen tumid and tense. A dose of calomel operated as a cathartic, and removed the tension. The whole surface of the abdomen then presented to the feel a congeries of small tumours, resembling a cluster of grapes. The Cicuta was prescribed. A cutaneous eruption soon appeared on various parts, which eventually covered the whole surface of the body: it took off every inch of the cuticle, and even the nails from his fingers and toes. The internal use of the hemlock was continued, and the
the child lay, for a considerable time, wrapped in a sheet, spread over with an unguentum e cicuta. As soon as the skin was so far healed, that I could examine the abdomen, I found every appearance of internal disease removed: some tumefied glands had appeared on the surface, particularly in the groins; these would not yield to the hemlock, but gradually disappeared, after the patient had recovered his strength.

In cases of phthisis pulmonalis, arising from a scrofulous affection of the glands of the lungs, the Cicuta demands our attention. It must be acknowledged, that it has not, always, answered my wishes; particularly where the symptoms of scrofula were ambiguous; but I must say that in several instances I have seen it produce much better effects, than it has been my lot ever to witness from the use of the fox-glove.

It is hoped that the Cicuta will prove an efficacious remedy in cases of jaundice, produced by biliary concretions.

About twenty-five years ago, I had under my care a man, who, for several months, had laboured under a jaundice, which resisted the common methods of cure. Reflecting on the usual
usual cause of the obstruction of the common biliary duct, it appeared to me improbable, that a biliary calculus, considering the usual form and size, should of itself, and at once, be able to produce a complete obstruction; there must therefore be a spasm or contraction of the duct. The acute spasmodic pain, often felt when a calculus first lodges in the duct, appeared to favour the supposition. A simple antispasmodic must therefore be the best remedy; and the Cicuta presented itself, as the most promising. Whether the theory be just or not, is submitted. The facts are, the man took the hemlock, every night, in increased doses. The morning after he had taken the first full dose, the bile began to pass, and the obstruction was soon completely removed.

Considering the variety of causes, which are capable of producing an obstruction of the biliary ducts, it is not supposable that hemlock, or indeed that any medicine, should, in every instance, be able to remove it. Three cases of this disease, combined with others, have happened within my knowledge, where neither this, nor any other means, succeeded: but, excepting those three, every patient, who has been under my care, for this disease, since my first use of this remedy; and every one, who, within my knowledge, has used it, has been
been cured by it; and, in one instance, the cure was effected by a single dose.

I will add only the case of the late President Willard: as he resided in this vicinity, it is probable, that most of the circumstances are known to some of the gentlemen present. When I first saw him, he had laboured, for more than six months, under a complete jaundice. During this period, he had punctually followed the advice and prescriptions of his physicians. Among other means, a course of calomel had been pursued, as far as was judged prudent. The obstruction remained fixed. I gave him some pills of the extract of hemlock, desiring him to take one the first night, and to increase the dose by an additional pill, every night, till he felt the usual symptoms of a full dose. On the seventh night, for the first time, he felt a slight nausea and giddiness. The next morning, he found that the bile had begun to pass through the duct. He continued the medicine in full doses, for some time longer: the passage became free, and was never afterwards obstructed.