

thognomonic diagnostic sign of typhoid fever. This valuable sign will serve to distinguish this fever from a simple and benignant fever, continuous or intermittent, in which the urine always contains an appreciable quantity of salts of this nature.

2. Urine passed during the ascending period, or even during the whole course of typhoid fever, when this has a fatal issue, shows not only an entire absence of the chlorides, but even a very considerable diminution of the phosphates and urates.

3. The first step towards convalescence is indicated, better than by any other sign, by a rapid and very sensible increase of the phosphates.

4. The second phase of amelioration is shown by an analogous increase of the urates.

5. Finally, the re-appearance of the chlorides in the urine, however tardy, definitely indicates the recovery of the patient.

It is important to remark here, that ocular inspection is not always enough to calculate approximatively the quantity of the urates; for although it is the fact that these salts, when they are in excess, are precipitated by cooling, and reveal their presence by making the urine turbid, or by throwing down a brick-dust deposit, it very often happens, also, that they remain in solution, owing to the presence of an alkaline bibasic phosphate which accompanies them. In this case it is sufficient, after cooling, to pour a few drops of acid into the urine, to see a large quantity of this liquid rendered turbid and thick from a copious precipitate of urates. Now as this precipitate resembles very much that which nitric acid produces in albuminous urine, M. Primavera advises in this case to employ acetic acid and not nitric, which precipitates both urates and albumen. It is also very probable, he adds, that the albumen often found in the urine of typhoid patients by certain practitioners who use nitric acid to the exclusion of all other re-agents, is in reality nothing but urates.

TREATMENT OF THE ASTHMATIC PAROXYSM BY FULL DOSES OF ALCOHOL.

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IN my work on Asthma, I state that I think the best diet for most asthmatics is one from which any form of alcohol whatever is carefully excluded. I still adhere to this opinion. I still think that, "unless there is some special reason to the contrary, water is the best accompaniment to an asthmatic's dinner;" that "in ordinary asthma stimulus of any kind is objectionable;" that "heavy malt liquors, especially those containing a good deal of carbonic acid gas, as bottled stout and Scotch ale, are of all drinks the worst for asthma." But since the publication of my book I have seen some cases which

have shown me—what I was unacquainted with at that time—the wonderful power that alcohol possesses, in some cases, of abolishing or preventing bronchial spasm. Its efficacy is such as to give it, in my opinion, a high place among the remedies for asthma.

The first case that brought this before my attention was that of a Scotch lady, who consulted me in May, 1862. She was 55 years of age, and had had her asthma for thirty years. She had been under the care of many physicians, but all the ordinary remedies of asthma had completely failed. The following is a list of some of the things she had tried, and their results, as I have recorded them in the notes I took at the time: “Nitre-paper—no good; others—no good; stramonium, in pills—no good; strong coffee—no good; lobelia—no good; chlorodyne—headache, no relief; emetics—no good.” But there was one remedy to which this otherwise uniformly unfavorable verdict did not apply, and that was, whiskey. For some time past this lady had been in the habit of taking this stimulus (how long I do not remember), and it had never failed. She took it with hot water, and began with much smaller doses than she ultimately reached; but at the time I saw her she would frequently take three doses, in rapid succession, of an ounce of Scotch whiskey each, very little diluted. Her sister told me it sometimes produced a very decided effect upon her—I mean, that it decidedly affected her head. It was a great distress to her to have to resort to such a remedy, and in such doses; but, as she said to me, what could she do? She could not go on in such horrible sufferings, knowing that she had immediate relief at her command; and nothing else reached her symptoms, while this never failed, let the paroxysm be as bad as it might. It was merely a question of quantity: if the spasm was very severe, she required more; if it was slight, less would do; but if the whiskey was only pushed far enough, the asthma could never withstand it. I saw her three or four times, but with the uniform result of all the remedies that I suggested failing; and she left my care, as she came under it, with whiskey the sole remedy of her disease.

The second case was also that of a lady, 45 years old, who had suffered from asthma fourteen years, and had tried literally *everything*—nitre-paper, emetics, stramonium-smoking, tobacco-smoking, chlorodyne, chloroform, ether, hyoseyamus, ipecacuanha, squill, strong coffee, iodide of potassium, tonics, &c., with hardly any benefit. She was recommended by a lady with whom she was residing to try gin, as it was “very good for asthma,” and she asked my consent, which of course I gave her, and she took a dose—two teaspoonfuls in a wineglass of water. The effect was immediate, and the relief complete. From that time she resorted to it under all circumstances, and always with the same result. No remedy that she had ever tried had produced such effects. The dose gradually increased, and the frequency of taking it also increased, till instead of taking

two teaspoonfuls she would take two wineglassfuls; a smaller dose would not do. Sometimes she would take this as much as three times in the twenty-four hours. I have seen her decidedly under the influence of alcohol. She herself had a great horror of it, and used to try to do without it, but nothing else would give her relief; and, after trying other things in vain, she would be at last compelled to resort to this her disagreeable, but always efficacious, remedy. In the autumn of 1862, I sent her to Malaga, to escape the bronchitis which had nearly killed her the winter before, and she was able there to leave off the gin. But, on returning to this country in May, 1863, she found she was obliged to take to her gin again. She has never found it do her any harm. It has a strong diuretic effect; but the relief does not depend upon this, as it is immediate, and long before the kidneys begin to act. The gin, she says, produces no exhilaration, but a sort of stupor; and, from this circumstance, she thinks that it acts as a sort of sedative, and relieves the asthma by this property. She always takes it with water as hot as she can bear it. If she took it with cold water, she thinks she might take any quantity, and that it would do her no good; for if she lets it stand till it is cool, and then takes it, it is useless. If, too, she takes it when suffering from bronchitis as well as asthma, or when the asthma is due to cold on the chest, it gives either very imperfect relief, or none whatever.

The third case is that of a gentleman at the present time under my care. I think I may say without exaggeration that his case is the most severe I have ever witnessed. I have never seen or heard of spasms so violent, or that seemed to threaten so nearly to put life in peril. His most intense spasms he calls "screaming spasms," from the strangling cries that the want of breath compels him to make. At the time of which I am speaking, he lived in the same street with myself, and though his house was half the length of the street from mine, his nurse has often assured me that if the doors had been open I could have heard his screams in my house at night. His case was as much characterized by intractability as severity. I may simply say that *everything* had been tried, and that nothing did him any good worth speaking of. The only thing that gave him any relief was chloroform, and that only lasted as long as he was under its influence; as he emerged from the state of unconsciousness, the spasm returned. All other remedies failed absolutely.

One day his nurse, who had seen benefit derived from hot spirit-and-water in the case of an asthmatic lady on whom she had attended, recommended him to try it. He was at first afraid to do so, thinking it could do him no good, and might possibly do him harm. He, however, took some, and was at once relieved by it. He was so convinced of the relief it gave him, that when, a few hours after, the difficulty of breathing was coming on again, he again resorted to it, and with like effect. He took it again and again, each time to

meet the spasm, and each time with the same result; the spasm stopped almost as soon as the brandy-and-water was swallowed. It was made very strong and hot—two thirds brandy and one third boiling water. In this way he took a quart of brandy in the first twenty-four hours that he tried it (at least so his nurse afterwards assured me), and went on in that way for two months, during which time he took twelve gallons of brandy. The spasms were so fearful and the relief so complete, that I gave my consent to this treatment, although I was appalled by the quantity of brandy he was taking. Indeed, I think that no prohibition of mine, if I had thought it right to prohibit it, would have been of any avail, so eagerly did the poor man cling to anything that gave him relief. On many occasions, the nurse has told me, he became quite intoxicated, but he was so imperious in his demands for the spirit that she was afraid to refuse him.

For the last five months the "spasms" have left him, but he has instead what he calls a "thickness"—tight constricted breathing—two or three times in the night, and sometimes by day; and this he finds equally relieved by the brandy—equally, but not so instantly relieved; the relief begins at once, but it is often ten minutes or a quarter of an hour before it is complete, and sometimes half an hour before he lies down and goes to sleep. He takes it twice in the night, or three times, but none by day. The quantity now consumed in the twenty-four hours is about five or six ounces. It now never produces any effect on his head. But though he takes it in such reduced quantity, it still must be taken hot and strong; to use his own expression, "the water should be boiling"—as hot as you can get it down; *warm* water is of no use.

He believes himself that the brandy acts by favoring expectoration; but this cannot be, as the relief begins prior to the spitting. I believe the order to be the reverse, and that the expectoration comes in consequence of the relief.

This is a remedy that one would, and properly, feel great reluctance in commencing. Alcohol is a thing the use of which is much more easily begun than left off. Moreover, it requires to be given in constantly increasing doses. Besides, if given as a remedy for a chronic affection, it has far more likelihood of becoming habitual than if taken for any other reason; for, since the circumstance that requires it constantly recurs, its administration also constantly recurs; and thus that which was given in the first place in small doses, and for a mitigation of suffering, is ultimately taken in excessive quantities, and becomes a necessity of itself. Still, in the face of the horrible sufferings of asthma and the inoperativeness of every other remedy, I think we are justified in giving it. I would go so far as to say I do not believe we should be justified in withholding it. Only our patient should be clearly made aware of the tendency of the remedy, and that it is one that can only be administered for

a certain time. If the paroxysms are of frequent occurrence, and the dose of alcohol required to subdue them is large, its unlimited continuance would only exchange the uncertainties of asthma for the certainties of kidney or liver disease, or delirium tremens: the common-sense rule of choosing the least of two evils would be enlisted against its use. I admit that this consideration, however striking the effect of the remedy, greatly diminishes its practical value. Still, in these cases I have related I have been very glad to avail myself of it, and the poor patients themselves have felt thankful that there was at least one remedy on which they could fall back in their extremity. It is a great point gained to stop the paroxysm in any way whatever; and the clinical history of asthma is so capricious, that it is always possible that before any remedy has been continued prejudicially long, it may on the one hand cease to be necessary, or on the other may cease to be efficacious.

What is the theory of the action of this drug in asthma? I think it is the same as that of other stimuli—of strong coffee, mental emotion, &c.; that it acts as what I call, for want of a better term, a “nervous derivative;” that it puts a stop to the asthmatic state by the establishment of a new nervous condition; it gives a sort of shock or shake-up to the nervous system; in the language of the French semi-official press, it “profoundly modifies the situation.” We know that an inceptive epileptic fit may be stopped on exactly the same principle. Such a theory has nothing in common with the treatment of acute inflammatory and other diseased conditions by alcoholic stimulation.

In carrying out this treatment the following rules must be borne in mind:—

That the alcohol must not be given as a diet—that is, not given as a part of a meal, or sipped gradually.

That it must be given in quantity sufficient to produce the physiological effects of the drug.

That the most concentrated forms of alcohol are the best—brandy, whiskey, gin; the weaker being inoperative in proportion to their dilution.

That for some reason or other—probably because it increases the stimulation—it is best given hot; not warm, but *hot*.

That its continued use requires that the dose should be constantly increased, in order to produce the same effect.—*Lond. Lancet*.

THE number of patients admitted to the Vermont Asylum for the Insane, at Brattleboro', for the year preceding the date of the last Report, was 98; remaining at the beginning of the year, 463; total in the Asylum during the year, 561. Discharged during the year, 119. Since the opening of the Asylum, 3552 have been admitted and 3,110 discharged, and of the latter 1,635 have recovered.