

## STRYCHNIA AS A POISON.

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But a few years ago, no antidote for the poisonous action of strychnia was known, the treatment being purely remedial, and in no sense, chemical. The spasms or jerks were often attempted to be controlled by what we usually style, antispasmodics, and such articles were passed into the stomach as are called demulcents, emollients and the like. As a matter of course, the patients generally died, after a brief period of terrible suffering.

In later years, the use of this poison has very greatly increased, partly because of the smallness of the dose, and partly because of the easy methods of concealing its administration. The multiplication of cases, however, has led to a more perfect understanding of its action, and the means of controlling its fatal tendency have had a corresponding increase, so that now we have abundant facilities for meeting the worst cases.

It not unfrequently happens that an individual who has attempted self-destruction by this agency, very soon after the poisonous symptoms develop themselves, announces the reality of his condition, so that the poison being certainly known, we have no difficulty in combatting it. In other cases, no such information can be had, and then we must rely on those marked, prominent signs present, which no practised eye can ever mistake. The *tetanic jerks or spasms* speaking for themselves, need no interpreter. The physician who is rightly informed understands all this, and decides on instant and vigorous action. He empties the stomach at once, by repeated use of the pump, or by means of a prompt emetic, as of ten grains of sulphate of zinc or sulphate of copper, every ten minutes, until the organ is thoroughly evacuated.

As to the query, "how much strychnia will kill an adult," no fixed answer can be given. Very much depends on the fullness or emptiness of the stomach at the time of swallowing the dose, not a little likewise is due to the previous habits of the patient, the morbid or healthful state of the system, &c. But when a physician is at the bedside of one who is actually under the influence of the poison, after evacuating the stomach as fully as may be, he must lose not a moment in administering the antidote.

The following facts are recited in my lecture on strychnia, at every session, and are now presented to the public in a group, for the purpose of furnishing the profession at large, with an array of means that will be found entirely adequate to any emergency.

Tannic acid and iodine were, for a time, almost the only proper antidotes in use. Both have succeeded, and are therefore reliable. *Braithwaite's Retrospect*, part 42, page 311, has evidence in point.

The acid may be given dissolved in water, ad libitum; at least an ounce should be put in a quart of water, to be drunk freely and largely. The use of it forms an insoluble and inert tannate of strychnia.

The tincture of iodine has also proved decidedly antidotal. Give twenty drops in mucilage of gum arabic or sugared water, at once, and in ten minutes after, thirty drops, and, if need be, forty drops for the next dose. This administration controls the spasms, and the patient is safe. An insoluble and inert hydriodate of strychnia is formed in this instance. See *Braithwaite*, part 41, page 62.

The *Vermont Caledonian*, July 1857, says that ninety grains of strychnia were swallowed by a man, in half a pint of strong gin, without his knowledge that the poison was present. As soon as the discovery was made, an emetic was resorted to, and recovery ensued. In this case, we have a manifest instance of the antagonism of poison to poison. The gin alone was competent to kill, and no one can doubt as to the potency of such a mammoth dose of strychnia, *per se*.

A case not very unlike the above is also given. A man who was perfectly drunk under the use of rum, swallowed sixty grains of strychnia at a dose. He recovered. In this instance as in the other, the alcoholic spirit and the strychnia were antagonistic poisons, either alone having abundant power to kill. Ordinarily, one grain of the alkaloid would destroy life, if there existed no morbid condition to counteract it.

Camphor has also been found to have an antidotal power; how, in a strict chemical sense, is not perhaps well understood. Dr. Claiborne, of Petersburg, Virginia, reports the case of a man aged thirty, who took two grains of strychnia. In forty minutes he was seen to be laboring under severe jerks or spasms, which continued nearly two hours, almost incessantly. Respiration and deglutition were nearly impracticable. Very large doses of camphor were exhibited, amounting altogether to 60 grains in less than an hour. Recovery ensued.

*Sulphate of morphia* is another antidote, and of course opium would prove so. In the *Western Lancet*, Dr. Phillips gives the case of a lady who was poisoned by swallowing three grains of strychnia at a dose, in mistake for sulphate of morphia, which she had long used for a spasmodic affection, and the dose of which had been gradually augmented. On making the discovery, the lady was placed in a very warm bath, and in less than two hours, she was made to swallow five grains of the morphia salt. The action of the poison was completely arrested and she recovered.

*Chloroform* was resorted to by Dr. Jewett, of Boston, (see *Boston M. and S. Journal*) in a boy aged 15, who in mistake swallowed two grains of strychnia. Medical aid was not procured until half an hour after the accident, when the jerks were violent and deglutition almost impracticable. He