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CLINICAL LECTURE ON POISONING BY OXALIC ACID.

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WHEN a large dose of this acid has been taken, or when it has been taken in a concentrated form, the symptoms set in quickly. In animals thus poisoned the symptoms are, exquisite abdominal pain, expressed by cries and struggling, soon succeeded by violent efforts to vomit, then by languor and debility, and death without convulsion occurs in from two to twenty minutes.

When much diluted the poison seems to act on the nervous system. In large doses it paralyzes the heart; in a less dose the animal is seized with tetanic convulsions, affecting the muscles of the chest and preventing their free action, and causing suffocation. When the dose is still less, the spasms are slight or altogether wanting, and the animal dies under symptoms of narcotism.

In man, death often comes on in a few minutes when a concentrated dose has been taken. If the poison have been diluted, the symptoms are, a burning pain in the stomach and sometimes in the throat; the pain is generally followed by vomiting. If life be prolonged there is violent irritation of the bowels, as evinced by pain and frequent inclination to go to stool, with bloody evacuations. The circulation is much depressed; the pulse fails, is very feeble; and the skin is cold and clammy. After some time there are weakness and lassitude of the limbs, followed by numbness. In a case recorded by Dr. Arrowsmith, an eruption of the skin, in circular patches of a deep red tint, perhaps erythema, came out, and the leeches which were applied to the stomach died almost immediately after they had bitten.

Such are the symptoms as detailed by Christison. Our patient, a strong young woman, was reported to have taken the poison about half past one. She was brought here about three, P. M. She went to a chemist's and asked for arsenic to clean boot-tops, but was told that that drug was not used for this purpose, but that oxalic acid was. She was given a paper labelled "*poison*," and the quantity was stated to be about the same as is usually sold for a dose of salts (a pennyworth). This, we are told, she swallowed, but not entirely; she took it in beer. No more was known respecting the act to those who accompanied her to the Hospital. They informed us that the cause of her committing this rash deed was a dispute with her mistress, but on further inquiry it appears that Cupid had a finger in the pie. The only symptom under

which she seemed to suffer was pain, yet evidently not exquisite. There was no failure of the pulse or the strength. We could not learn that she had vomited; there was no redness of the tongue or irritation of the fauces.

Notwithstanding the absence of the ordinary signs, I felt it my duty to act as if I were certain the poison had been taken. The ready antidote to the poison is lime, given as lime-water or chalk mixture. These were at hand, and I had her, therefore, well drenched with them, especially with the latter. I felt even that it was better to introduce these agents into her stomach at once, and to make a harmless oxalate of lime, than lose time in waiting for the effects of emetics to evacuate the stomach.

Some of you seemed disappointed that I did not use the stomach-pump. My reasons for this were—first, because the patient made no difficulty about swallowing, consequently the fluids we should have introduced by the stomach-pump were taken in much more easily and quickly, and without violence. Second, the great value of the stomach-pump is to pump *in*, not to pump *out*; and however it may be necessary in some instances to apply it to the latter purpose, it was not required in this, the neutralization of the acid being our great object. In pumping out there is danger of irritating the coats of the stomach, or sucking them into the tube, and as oxalic acid is an extremely irritant poison, I felt that this risk ought to be avoided. At a little before five o'clock the patient seemed composed; pulse 90, and stomach soft, but somewhat painful on pressure. She seemed sulky and reluctant to answer. She had been liberally dosed with chalk mixture. I prescribed half a drachm of sulphate of zinc, an emetic, and after its operation directed the chalk to be resumed. If signs of stomach or bowel irritation manifested themselves, leeches and fomentations were to be applied.

You have seen the patient to-day; she is now free from pain or fever, but she is reported to have suffered severe griping pain in the night, which, indeed, is almost the only symptom she has had.

It must be evident to you, from what I have told you of the ordinary symptoms of oxalic acid poisoning, that this patient took but a small portion of the drug, and that not in a concentrated form. This case has not, therefore, afforded you a fair specimen of the more striking effects of this poison, but it has given you an opportunity of observing the course of treatment which ought to be pursued in all cases of this kind, real or suspected, and therefore it has not been devoid of considerable practical utility. The too frequent occurrence of such cases cannot fail forcibly to impress upon us the lamentable want of some legislative enactment to prevent the indiscriminate sale of poisonous drugs. A fearful responsibility rests upon the venders of such articles, and it would seem that some stringent law upon this subject is as much to be desired for their protection as for that of others of the public.—*London Lancet.*