

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. XCIII. — THURSDAY, SEPTEMBER 2, 1875. — NO. 10.

IVY POISONING.

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THE frequent poisoning by ivy (*rhus*) at this season, when so many of our city residents, unfamiliar with its appearances, come in contact with it during their visits to the country and seaside, leads me to call attention to the importance of instructing the public respecting the means by which this plant may be generally and easily recognized and shunned.

Poison ivy, as it is popularly called, is not an ivy, but belongs to the sumach genus. It is *rhus toxicodendron*. It is sometimes a vine running over or by the side of stone walls, fences, and ledges, or ascending trees to a great height, and sometimes a bush of considerable size and thickness. It is found almost everywhere in New England, in many places growing in great abundance, and forming dense masses by roadsides, in pastures, and along the borders of woods. Its leaves have a marked and very characteristic glossy look, and vary greatly in shape, size, and outline. They are ternate, as the botanists say, that is, they consist of three leaflets, one terminal and two lateral, growing in common upon a rather long, semi-cylindrical stem. The leaflets are ovate with rather a broad base, more or less pointed, and their edges are either entire or notched and lobed in a great variety of forms. It blossoms in June, and the flowers are small and grow in greenish-white clusters, mostly in the axils. The berries are small, round, and also of a pale greenish-white color. Later in the season the leaves assume a great variety of most brilliant colors and attract many gatherers of autumn foliage.

Of the other dangerous species of *rhus* (*rhus venenata*), although it is far more poisonous than the above, less need be said, for it grows much less commonly than the latter. It is a small tree, as its common names ("poison dogwood," "poison sumach") suggest, and is found mostly in swamps. Its leaflets, like those of the ordinary sumach, grow upon a long stem and vary in number from seven to thirteen. They are smooth, broader than those of the latter plant, and the terminal one

grows from a considerable prolongation of the common stem. In the autumn its foliage surpasses that of all other trees in the variety and brilliancy of its tints, and thus attracts to its less frequented haunts not a few unwary visitors.

The virulent principle of these plants is a volatile acid which exists in all their parts, but especially in the leaves. All persons are not affected by it, but many who can handle the vine, *rhus toxicodendron*, with impunity are poisoned by the tree, *rhus venenata*, so much more virulent is the latter. Actual contact with the plants is not in all cases necessary for the production of their poisonous effects, on account of the volatility of their active principle; and there is good reason to believe that persons highly sensitive to the poison not unfrequently suffer from passing by places where the vine grows abundantly. The plant is supposed to be most actively virulent during the flowering season in early summer, but cases of poisoning occur with great frequency throughout the autumn, when its leaves take on their seductive coloring. Even in the winter the twigs and stems are often found still alive for mischief by those who handle them.

The peculiar effect of the poison is alike in kind upon all who are affected by it, but varies greatly in intensity. The inflammation it excites upon parts coming in contact or contiguity with it is that of an acute *eczema*, characterized by the eruption of vesicles of a peculiar lurid or brownish-red color, which may subsequently burst and exhibit the later phases of this efflorescence as in other acute inflammations of the skin. In addition, there is more or less of swelling and redness of the parts affected, sometimes to a very marked degree, so that great deformity may thus be produced, and the face of the patient be changed out of all recognition. These changes in the tissues of the skin are accompanied by intense itching and burning, and often great suffering is undergone by the patient in consequence. Fortunately the affection is of short duration, the acute stage lasting ordinarily but a week or ten days under treatment, and its whole course rarely exceeding three or four weeks.¹ Moreover it is not a dangerous affection, although a person severely poisoned over a large surface may present a frightful appearance to his friends. Its effects, however, are never more than skin deep. The eruption generally shows itself within three or four days after contact, sometimes within twenty-four hours. The period of incubation may, however, be prolonged to five or six days in some cases, and fresh blisters may continue to appear for two weeks or more. No danger of contagion by contact with the eruption upon another person is to be feared. The portions of the body most commonly affected are the hands and face, the parts naturally most exposed to contact, but

¹ For a more particular description of the eruption, see an article in the *New York Medical Journal* of March, 1873.

other parts handled by the former immediately after contact and before washing may have the poison thus transferred to them and be similarly affected. No scars or permanent injury to the skin or general system are to be apprehended in ordinary cases.

A few words with regard to the treatment of rhus poisoning may not be inappropriate in this connection, especially in relation to the means to be immediately used, those to which the term antidote may be properly applied. The poison, as has been stated, is a volatile acid. An alkali would therefore suggest itself as the most fit agent to counteract its action. Thorough washing of the parts, as soon as possible after contact with the poison, in cooking-soda or saleratus water, or in strong soap-suds, especially those of soft soap, which contains an excess of alkali, is therefore the best primary treatment. When these or other alkaline preparations are not to be obtained, an abundance of water alone should be used as soon as possible. After absorption has taken place, or the eruption has begun to show itself, less benefit is to be expected from such applications alone. Remedies are then to be used which will best control and shorten the inflammatory process in the tissues of the skin ; those, in fact, which are found to be most efficacious in corresponding stages of acute eczema. Among these are some which have a special reputation, as solutions of acetate of lead or sulphate of copper, applied frequently as a wash. Perhaps nothing is better than common black wash used as an evaporating lotion for half an hour at a time, twice daily, the lime water acting also as a chemical antidote, if possibly such action is still in season at this later stage. In the intervals between the applications of these washes the parts may be kept covered with cold water dressings, with plasters of diachylon ointment, or with a powder of starch and oxide of zinc, according to the rules familiar to physicians for the treatment of acute eczema. By these means the process is checked and shortened, and the sufferings of the patient greatly alleviated.

In conclusion, a brief word of caution to sojourners in the country who are unacquainted with these poisonous plants. Avoid any vine or bush growing by rocks, fences, and woodsides, with glossy leaves arranged in threes, and in the autumn any particularly brilliant tree in swampy places, with leaves resembling, but broader than, those of the common sumach.