

The stomach and intestines suffer less often than the nasal and bronchial membranes, if the precautions are observed of never giving the iodides solid, except in small quantity, during or immediately after a full meal. When a large quantity is given, it must always be in solution largely diluted, and taken upon a full stomach if possible. A neglect of these precautions not infrequently produces pain in the pit of the stomach, loss of appetite, griping, diarrhoea. Mild attacks usually subside even with a judicious continuance of the remedy. But in rare cases the symptoms are so violent that the drug has to be discontinued.

The iodide of sodium is much less irritating to the stomach and intestines than the iodide of potassium. Its effects upon the skin seem also to be less marked; but, on the other hand, its therapeutic action does not appear to be as prompt or effective. This irritation of the membranes, when not subsiding rapidly enough upon suspension of the remedy, may be hastened away by diuretics and diaphoretics.

4. *Eruptions caused by the Iodides.*—Three forms of eruption are encountered upon patients taking the iodides and produced by the drug. In patients where the elimination by the kidney is rapid and thorough, generally neither iodism nor any eruption is encountered. The eruptions are, in the order of their relative frequency: acne, erythema—more or less modified—purpura.

1. *Acne.*—A few pustules or papulo-pustules of acne (simplex or indurata) generally appear during a course of the iodides. Their favorite site is about the forehead, cheeks, shoulders, back, buttocks, and extensor aspect of the limbs. They are usually unimportant, but sometimes they occur in profuse crops, covering nearly the whole body, and are then painful and unsightly. With acne may be associated large tuberculo-pustules and boils.

2. *Erythema.*—Iodic erythema, as commonly observed, covers the slopes of the nose and portions of the cheeks and forehead. It is followed by branny desquamation. It may occur upon other surfaces, isolated or in large patches, particularly on the forearms. It is sometimes attended by papulation. Papules may appear, not acneic and not surrounded by erythema. The erythema may run on to eczema about the face and scalp. Mercier<sup>1</sup> mentions a case where in the same patient, on two occasions, small doses of the iodide of potassium produced a severe eruption of eczema rubrum over the whole body. Another form of vesico-pustular (bullous) eruption occurs, but is exceedingly rare.<sup>2</sup> It is very severe. Slight erythema usually precedes the development, all over the body, of patches, more or less large, of bullæ, some of them umbilicated, of the size of a split-pea to nearly that of a penny. They quickly become purulent. They are accompanied by burning pain and

<sup>1</sup> Quoted by Bumstead, from *L'Union Médicale*, February 11, 1860.

<sup>2</sup> The authors have encountered one very striking case.

itching, and disappear rapidly upon discontinuing the iodide, to reappear if the drug is again exhibited.

3. *Purpura* may be caused by large, sometimes by moderate, doses of the iodides; chiefly in debilitated, anæmic subjects, suffering from syphilitic cachexia and tertiary lesions. Case L. illustrates this point, where the patient was surrounded with every comfort, eating vegetables, not overworked, or seemingly in any way scorbutic. The best-marked cases of purpura hæmorrhagica, in the authors' experience, are encountered in connection with advanced tertiary disease, as in giving large doses of iodide for nervous syphilis. Iodic purpura rarely gets above the knees. It is accompanied by some œdema. It may occasionally reach the thighs, or be seen upon the hands. It often ceases to appear upon discontinuing the drug, or change of air. The exhibition of cod-liver oil, astringent preparations of iron, and other hygienic and tonic measures, are indicated. All of the bad results of iodine disappear when the drug is discontinued. The acne and erythema may be moderated by plentiful warm baths and a diuretic (half-drachm doses of acetate of potash), which hasten elimination somewhat and prevent bad effects, without interfering with therapeutic action.

*Method of administering Iodine in Syphilis.*—Only certain iodides, of those in general use, are valuable as controlling syphilitic manifestations. These are, the iodides of potassium, sodium, ammonium. The first is preferable, if it can be borne, the iodide of sodium is milder, the iodide of ammonium is more difficult to take, and is rarely used alone. It may be conveniently combined with the iodide of potassium, the action of which seems to be increased by any ammoniacal preparation; of which the favorites are the muriate and the carbonate. In selecting an iodide, the preparation of sodium should be commenced with where the *primæ viæ* are in an irritable condition. Inflammation of these organs contraindicates the use of iodides.<sup>1</sup>

The iodine may be given pure in small doses. Dunton's compressed pills of iodide of potassium, containing gr. v each, may be used if taken with or immediately after food. Not more than gr. v of solid iodide should be taken at a single dose, for fear of irritating the stomach. When given alone, the iodides are best combined with tincture of bark or of gentian.

R.	Potass. iodidi,	ʒ ij.
	Ammonii iodidi,	ʒ j.
	Tr. cinchonæ co.,	ʒ iij.
M.	S. Teaspoonful, largely diluted with water, after eating.	

When a considerable quantity has to be taken for a long time, it is best to order the concentrated solution:

<sup>1</sup> In certain cases, where it has been impossible to administer iodides by the stomach, the authors have obtained excellent effects by using them in the rectum. As much as half-drachm doses daily have been given dissolved in an ounce or more of beef-tea. The stomach is spared in this way for food, but usually the rectum revolts after a time, especially if the solution of the iodine be too concentrated.

