

IODIPIN: ITS PHYSIOLOGICAL AND THERAPEUTIC IMPORTANCE.

BY LUDWIG HESSE.

THOUGH the recognized curative effects of Iodine have led to its very extensive therapeutic application, the disagreeable, and in some instances dangerous, action of this metalloid and its salts has given rise to a pressing demand for some Iodine compound that would be free from such objectionable properties, or have them only in a less degree. It would be unnecessary on this occasion to consider the relative merits and demerits of the Iodine preparation that are in most general use. My object is to direct attention to Iodipin—a preparation that has been but recently made known. Its preparation is based upon the well-known property of fat to combine with the halogen, the capability of forming Iodine addition compound being proportionate to the position of the fat in the series of unsaturated fat acids as their triglycerides. To effect the addition of Iodine in the preparation of Iodipin, sesame oil is treated with Iodine monochloride; other kinds of oil may be used for the purpose, but sesame oil is preferable, on account of its great digestibility, freedom from taste, and general agreeable character to which attention has been directed by V. Norden and Stüve.

Iodipin is prepared as an article of commerce by the firm of E. Merck, at Darmstadt, in two states of concentration: 1. 10 per cent. Iodipin, containing 10 per cent. of the halogen, and applicable chiefly for internal administration; 2. 25 per cent. Iodipin, containing 25 per cent. of halogen, and specially adapted for injections.

The 10 per cent. preparation is scarcely distinguishable in appearance or taste from the natural sesame oil. When suitably kept it does not undergo decomposition, but preserves its character as a pale yellow oily liquid, having at 20° C. a specific gravity of 1.025, insoluble in water or alcohol, but readily soluble in either benzene, chloroform or petroleum spirit. The ether solution shaken with silver oxide or mercuric oxide does not give off its iodine. When treated with caustic alkalies, iodipin is split up and the solution acidified with nitric acid gives a precipitate of argentic iodide on addition of a soluble silver salt. When Iodipin is mixed with fixed alkaline carbonates and incinerated, the aqueous solution of the ash gives the reactions of alkaline iodides. Mixed with concentrated sulphuric acid Iodipin becomes dark colored and swells up. Above the dark colored column of liquid there is a violet colored zone of Iodine vapor. Iodipin does not dissolve in concentrated nitric acid, but when heated with it to the boiling point becomes dark colored and suddenly evolves Iodine vapor with explosive force.

The 25 per cent. preparation has the appearance of a thick