

CHAPTER III.

ON THE MODE OF PRESCRIBING THE PREPARATIONS OF IODINE.

I PROCEED to an analytic view of the preparations of iodine alluded to in the preceding cases. I shall divide them into two sections: the first comprising all those formulæ in which the remedy is prescribed for internal use; the second section will contain an account of all those intended for external application.

INTERNAL TREATMENT.

In my first Memoir (see pp. 10, 11) I have advanced my reasons for opposing the use of the tincture and syrop of iodine; I have shown that in both these modes of compounding the remedy the iodine was precipitated on the parietes of the stomach, and that in order to prevent the corrosive action which might ensue I deemed it advisable to give the remedy in solution in distilled water.

I was at the same time aware that though this solution was a superior mode of giving the remedy internally, yet that the scanty solubility of the iodine and the large quantity of water consequently required as a vehicle for small proportions of the active substance were considerable objections to its use. Experience also taught me another inconvenience

converted or evaporated or both

in the aqueous solution; namely, that in a few days it loses its colour, especially when exposed to the light, which converts the greater part of the iodine into hydriodic acid. Part of its activity is thus lost, and its uniformity of therapeutic action much impaired.

The experiments which were first made to find the exact composition of ioduretted baths, directed me also to the most certain and least inconvenient method of prescribing iodine for internal use; viz. by dissolving the iodine in a solution of potash. I have therefore for a considerable period abandoned the use of the aqueous solution mentioned in the first Memoir. I subjoin a tabular view of the constitution of the solutions I am now in the habit of administering, graduated in three different proportions, so that the iodine may be given internally in the progressive dose of half a grain, three-fourths of a grain, or four-fifths of a grain daily.

No 1:
3/4 gr Iodine
1.5 gr KI
8 oz distilled water

= 48.75 mg I2
/ 240 mL >- 20 mg/100 mL,
200 mcg/mL,
10 mcg/drop
mg/L= 200 ppm or 0.02%

IODURETTED MINERAL WATER.

	No. 1.	No. 2.	No. 3.
℞ Iodine.....	gr. ʒ ..	gr. i ..	gr. 1½
Hydriodate of potash	gr. 1½ ..	gr. ij ..	gr. ij ʒ
Distilled water	ʒ viii ..	ʒ viii ..	ʒ viii

cohlife.org/apothecary-system

The use of Latin ensured that the recipes could be read by an international audience. There was a technical reason why 3 3 was written ʒij, and 1 2 3 as ʒss: Writing iii as ij would prevent tampering with or misinterpretation of a number after it is written.

This solution is perfectly transparent, of a beautiful orange colour, and keeps for a considerable time. Children drink it readily when it is mixed with a little sugar, but this addition should only be made at the moment of the administration of the medicine, as in the course of a few hours after sugar is added, decomposition takes place, the liquid becomes colourless, and its activity is partly destroyed.

I commence the internal treatment with half a grain of iodine; for this proportion I prescribe two-thirds of the mineral water No. 1. In the second fortnight I gave the entire of this number; that is, three-fourths of a grain daily,

No 2:
200 ppm *
1.333 =
267ppm

No 3:
200 ppm *
1.25/0.75
= 1.667*
200 =
330 ppm

2 wks at 32.5 mg/day
2 wks at 48.75 mg/day
2 wks at 65 mg/day
Occ 1.25 - 1.5 gr = 80 - 97.5 mg/day