

## THE ADMINISTRATION OF CERTAIN DELIQUESCENT AND LIQUID DRUGS IN CAPSULES.

N. S. DAVIS, M.D., CHICAGO.

It is so much pleasanter to take medicine in capsules than in other ways that it has been my habit when I can do so to administer it in them. Pharmacists find it impossible to dispense extemporaneously in capsules many deliquescent substances and most liquids. A dozen or more years ago my attention was called to the possibility of dispensing many such substances in a capsule by using a wax mass. In this way potassium iodide and similar drugs can be given, also guaiacol, oil of sandalwood and many other liquids which one wishes to prescribe in doses of from 5 to 10 minims. The iodides can be given in doses of 10 or 12 grains (from 0.5 to 0.8 Gm.), and the pill will be readily absorbed, as is shown by finding iodine in the saliva in three minutes or less after such a capsule is swallowed.

The capsules are permanent, keeping for weeks ordinarily and in the hottest, dampest weather, if placed in a corked bottle.

For the making of a pill to be placed in a capsule containing sodium or potassium iodide in doses of 10 or 12 grains (from 0.5 to 0.8 Gm.), about 1½ grains (0.1 or 0.15 Gm.) of the wax mass is needed. Red mercuric iodide and other drugs can be incorporated in the same mass if they are required.

To make a pill containing guaiacol, oil of sandalwood or similar liquids in doses of 5 minims or thereabouts, the same quantity of mass is needed.

I have often given iodine incorporated with this mass, and have obtained from it as prompt and as good results as when it was given in solution. But I have found it possible to give it, without discomfort to patients, in larger doses. For instance, from 2 to 4 grains (from 0.15 to 0.25 Gm.) can be given in this way, though I rarely have given more than 2½ grains at a time. I have made it a practice to dilute the iodine well with the mass in order that the pill may not cause gastric discomfort, and possibly I use more of the mass than is necessary for this purpose. I usually prescribe at first 1 or 2 grains (0.05 or 0.10 Gm.) with 5 grains (0.3 Gm.) of wax mass. Undoubtedly, the oil in the mass is responsible for carrying the iodine and for diluting it and releasing it so as not to cause gastric discomfort. When administered in this way, iodine appears with its usual promptness in the saliva. Cascara, aloes, codeine and many other drugs can be incorporated with it when they are needed.

The wax mass is made of one part beeswax and three parts of castor oil. These ingredients are melted and mixed by heating them gently. When liquefied and thoroughly mixed, the mass is allowed to cool. It makes a somewhat granular pill. I do not know who invented the mass, and I have rarely found a pharmacist who knew of it.

I have never seen the castor oil produce looseness of the bowels, and we would not expect it to, so little of it is administered at a time.

Guaiacol and oil of sandalwood and similar substances can be readily mixed with from one-half to equal parts of beeswax and made by gently heating into a mass. Such a one, however, is needed only when a prescriber is using these substances with frequency.—*Journal A. M. A*

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