

usual bromides. Its oily basis gives it a nutritive value in addition to the medicinal value which attaches to the bromine element. It is employed in epilepsy, in hysteria and neurasthenia, and it has been specially recommended in nervous insomnia, vertigo, and agoraphobia; also in eclampsia infantum (Wassing, Rahn). The nutritive and strengthening properties of bromipin have been frequently insisted upon by many observers, and more recently by Moller.

Large doses should be given in enema form, the $33\frac{1}{2}$ per cent. strength of bromipin being employed and made into an emulsion with milk. In the case of children and infants Rahn employs the 10 per cent. strength in enema, administering to infants as many grammes as the infant counts months. Children of 1 to 4 years receive 160 minims up to one half ounce; children above these ages 6 to 8 fluid drachms. To adults $2\frac{1}{2}$ to 4 drachms of the $33\frac{1}{2}$ per cent. should be given.

The symptoms of bromism are of much less frequent occurrence with this preparation.

For administration by mouth the following formula has been recommended by Kothe (*Merck's Report*, 1901):—Bromipin (10 per cent.), fl. oz. $3\frac{1}{2}$; the yolks of two eggs: emulsify and then add—Cognac, fl. oz. $\frac{1}{2}$; menthol, gr. $2\frac{1}{2}$. Three or four tablespoonfuls to be taken daily.

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Lecithin [Ovolecithin]. (Merck's Report, 1903.)

As a means of promoting nutrition and of conveying phosphorous action in a milder and safer way than by the uncombined element, lecithin appears to be making steady progress, and, we are glad to learn, it has become considerably cheaper.

Its employment in malnutrition in all its forms will interest the alienist equally with those who work in other departments of medicine. The drug may be conveniently given by the mouth in the form of pill or tabloid. Merck's tabloids contain each $\frac{2}{3}$ gr. of lecithin, and of these five to eight are taken before each of the two principal meals.

It may be combined with cod-liver oil in the proportion of 15 grs. of lecithin to 8 oz. of oil, of which two to four tablespoonfuls are to be taken at meal times. This is very large dosage of oil according to the practice of this country, and in order to make the lecithin dose correspond to the smaller administration a much stronger solution of lecithin would be required. Lecithin is so freely soluble in olive oil that there should be no difficulty about this.

Lecithin is also injected subcutaneously, in solution in olive oil which has been previously washed in alcohol and sterilised. Eight grains of lecithin dissolve in 10 c.c. (160 minims) of the oil, and of this 1 to 3 c.c. (16 to 48 minims) are to be injected on alternate days.

Lecithin in subcutaneous injection has been praised by Hartenberg in tabes, general paralysis, hysteria, and various psychoses (*Merck's Report*, 1902). It is recommended also in neurasthenia, senilitas præcox, etc. (*Report*, 1903). In phthisis, administered subcutaneously, it is much praised; also when combined with guaiacol.

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