

A Comparative Study of Various Methods of the Administration of Luminal in Epilepsy. (*Journ. of Nerv. and Ment. Dis.*, May, 1926.) Patterson, H. A., Damon, Le G. A., and Levi, P.

The authors used oral, subcutaneous, intravenous and intrathecal methods of administration. Orally they usually gave $1\frac{1}{2}$ gr. each evening. Hypodermically they gave from 5 to 15 gr. of sodium luminal in sterile water. Intravenously 2 gr. of sodium luminal in sterile physiological saline solution was given, gradually increasing at two-day intervals by 1 gr. to a maximum of 5 gr. In using the intrathecal method, 1-3 c.c. cerebro-spinal fluid was withdrawn, and then sodium luminal solution in sterile physiological saline was given, gradually increasing the dose from 1 gr. to 5-6 gr. Whilst using this method, the patients were kept in bed under observation. Cases in which the therapeutic dose was exceeded showed in the fluid typical sterile meningitis with a very high cell-count, sometimes up to 6000 cells per c.mm.

No tolerance develops by any of these methods. The time required for the appearance of therapeutic effects is as follows: Orally, 1-2 hours; subcutaneously, 15-30 min.; intravenously, almost immediately; and intrathecally, $\frac{1}{2}$ hour or more.

Luminal by any of these methods has more effect on the severe seizures than on the mild ones.

The employment of the intravenous method is indicated in *status epilepticus*, the subcutaneous method in serial seizures. Intrathecal injection may subsequently render unresponsive cases more amenable to other types of treatment.

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Therapeutic Results with Tryparsamide in the Treatment of Neuro-Syphilis. (*Journ. of Nerv. and Ment. Dis.*, August, 1926.) Neymann, C. A., and Singleton, D. E.

The authors treated 50 cases of neuro-syphilis, including 18 of general paralysis with tryparsamide. The average number of doses given to each patient was 28, the average observation period about 1 year. Of the 18 cases of general paralysis, 5 made a social recovery and were at work, 4 were strikingly improved, but were still in hospital, 9 were unimproved. The 5 recovered cases showed negative serology, as did also one of the improved cases. Of 12 cases of tabo-paresis, 4 made complete social recoveries, 2 were greatly improved, and 6 were unimproved. Three of the cases that made social recoveries finally had a negative spinal fluid. Of 4 cases of tabes, 2 improved, 1 remained stationary, and 1 progressed. Of 10 cases of endarteritic type and 3 of meningitic type of cerebral syphilis, 3 recovered and 4 improved. The authors found 10% of their cases showed a slight transitory toxic amblyopia. They consider the toxicity of the drug as practically negligible, however. Any evil results are far outweighed by the therapeutic value of the drug.

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