

injection of fluid into the ventricles and removal of fluid by ventricular or lumbar puncture, or the injection of air into the ventricles or lumbar subarachnoid space. After the injection of air the situation and amount can be determined by X-ray films. These procedures make it possible to investigate the connection between amount of air, situation of air, etc., and the occurrence of headache.

This first report deals with the headache that follows the injection of air into the lumbar subarachnoid space for purposes of encephalography. The procedure was carried out on 86 patients by the method described by Davidoff and Dyke. The patients suffered from various neurological symptoms. Details are given of correlation of the factors mentioned above—amount of air, situation, headache. The authors found that headache occurred most often at the time when the injected air had entered the third and lateral ventricles. This makes it probable that the presence of air in these loci is connected with the production of headache. There are differences in the situation of the headache when the head is in various positions. They conclude that the results of studies of headache occurring during encephalography may shed light on the mechanism which produces headache under other conditions.

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### 5. Oligophrenia (Mental Deficiency).

*A Comparison of Orthogenic Backward Children and Regular Grade Children at the Six-year Performance Level.* (Psychol. Clinic, vol. xxii, p. 149, Sept.-Nov., 1933.) Farson, M. R.

The location of children in O.B. classes must be made upon a wider basis than that of a particular psychometric measure. There should be a pre-analytic judgment by the teacher, followed by an analytical diagnosis by a psychologist. It is necessary to have a battery of tests varied enough to explore competency in diverse fields. A qualitative analysis of test results is more important than a quantitative measure. The Witmer form board and cylinder, Healy A form board, memory spans and Binet tests are significant at the six-year level.

M. HAMBLIN SMITH.

### 6. Treatment and Pharmacology.

*Hæmatological Changes induced by Barbituric Intoxication [Modificaciones hematólogicas determinadas por la intoxicación barbitúrica].* (La Semana Méd., vol. xli, p. 355, Aug. 2, 1934.) Carratalá, R. E.

During the past few years, the author has gathered observations in twelve cases of well-defined barbituric coma, and these serve to differentiate it from other comas. One type of case is characterized by a diminution in the number of erythrocytes, and this is pronounced in fatal cases. In another type we have an initial hyperleucocytosis with a predominance of polynuclear cells. Attention is also called to an eosinophilia, which possesses diagnostic and prognostic importance. Experiments upon dogs and rabbits have confirmed the clinical findings. The calcium, magnesium and phosphorus contents of the blood are diminished in barbituric intoxication.

M. HAMBLIN SMITH.

*Carbohydrate Metabolism in Barbiturate Narcosis.* (Arch. Intern. Pharmacodynamie, vol. xlvi, pp. 111-22, 1934.) Mulinos, M. G.

The four barbiturates studied (amytal, nembutal, pernocton and dial) cause a definite hyperglycæmia in rabbits and dogs, and a 40% decrease in the alimentary hyperglycæmia following the administration of glucose by stomach-tube. Nembutal causes the appearance of a reducing substance, not glucose, in the urine of cats. These results entail caution in the interpretation of results obtained in rabbits under barbiturate anæsthesia.

H. EAGLE (Chem. Abstr.).