of a young lawyer who became imbecile, with incontinence of stools and urine. The tumor, presumably a diffuse glioma in the frontal lobe, could not be localized. The entire head was submitted to cross-fire exposures of all regions except the occiput which was too difficult to reach. The aluminum filter had a thickness of 10 cm.; rays were applied until depilation was complete. Improvement was apparent in five or six days, and recovery was soon complete. Two cases of cerebellar tumor responded to the therapy; a third case died, and a fourth did not improve, although the course of the tumor was arrested. A later operation revealed a cyst in the cerebellum, with complete recovery after drainage of the cyst. This cyst may have been developed in the space left by the healing of the tumor under the treatment.

Lashley, K. S., and Franz, S. I. CEREBRAL FUNCTION IN PARTIALLY DECEREBRATED RATS. [Psychobiology, Vol. 1, No. 2.]

Various parts of the cerebral cortex, including frontal, temporal, parietal and a large portion of the orbital surfaces were destroyed in rats who were afterwards trained, and ability of forming and retaining kinesthetic motor habits tested. With any part or all of the cortex lying in front of and above the knee of the corpus callosum destroyed, as well as any part of the temporal and parietal regions, the rats were able to turn correctly in a simple maze. The maze habit was acquired after destruction of all the cortex, and one, or possibly both of striate nuclei. The inclined plane box habit was lost on complete destruction of the frontal regions of the cortex, but with partial destruction, or destruction of the temporal regions, was still retained. The retention of the habit seemed to be determined by the preservation of any part of the frontal pole, regardless of what part has been destroyed. Hemiparesis appeared as a result of destruction of the corpus striatum, but complete destruction of the stimuable areas of the cortex did not seem to cause any motor disturbances.

Borries, G. V. T. LUMBAR PUNCTURE WITH ABSCESS IN BRAIN. [Hospitalstidende, Vol. 62, No. 25.]

Four types of cerebrospinal fluid at lumbar puncture with suppurative cerebral and subdural processes are demonstrated. When the abscess is free from complications the fluid may be clear. Respiratory paralysis as a result of the suppurative process may prove fatal, and the lumbar fluid still show no signs of pleocytosis. Turbid fluid indicates irritation, and not necessarily eruption of pus, as the fluid may be sterile, the leptomeningitis may not be perceptible to the naked eye. In cases that succumb to cerebral lesion, even, the leptomeningitis may never have passed beyond the microscopic stage. The lumbar puncture fluid enables one to distinguish between an uncomplicated diffuse leptomeningitis process in the brain. We may assume a brain abscess

free from complications; its characteristics are those of a benign course. The symptoms from the brain abscess may grow more severe while the spinal fluid is clearing up. Hitherto no one has thought of using this factor to distinguish between an abscess and meningitis. Borries cites cases from literature and his own practice in support of this observation, and points out that the results of a single lumbar puncture are apt to be misleading.

Tapie, J., and Cassar, A. MYELOID LEUKEMIA WITH HEMIPLEGIA OF HERPES ZOSTER. [Arch. d. Mal. d. Cœur, May, 1919.]

Nervous affections as complications of leukemia in the form of cerebral hemorrhage, convulsions, facial paralysis, and symptoms from pressure on nerves by lymphomas are noted in two cases presented by Tapie and Cassar. In addition to this there was occipitofacial herpes zoster in a man of fifty-seven. Complete hemiplegia with fatal leukemia occurred in the second case, that of a younger man.

Ogdon, R., and Franz, S. CEREBRAL MOTOR CONTROL. [Psychobiology, Vol. 1, No. 1.]

Hemiplegia artificially produced in four animals was treated by various methods to determine conditions favoring voluntary motor recovery. If the animal is left to its own devices experiment shows that motor recovery after production of hemiplegia does not come about. There is little improvement in cases where the animal is prevented from moving the unparalyzed segments, or when no treatment is given, aside from extra stimulation of the muscles and nerves on the paralyzed side. Recovery is rapid when treatment by muscle stimulation and nerve vibration is directed to the parts involved and when special exercises to provoke the animal to move the paralyzed segments are given. General massage, the treatment recommended by neurologists, produces a slight improvement but not to the extent of enabling the animal to use the arm and hand for the ordinary operations of feeding and climbing; the activities may be carried out awkwardly, however, after treatment. When efforts are directed to the special nerves and muscles, and when the sound side of the animal is restrained so that climbing and feeding movements must be made by the use of paralyzed segments if they are to be made at all, improvement is rapid and recovery practically complete. A fact of interest is that recovery from the hemiplegic state may be very rapid. The results of these experiments suggest a reconsideration of the whole problem of cerebral motor control, especially that of cortical motor control.

Abrahamsen, H. TREATMENT OF SPASTIC HEMIPLEGIA. [Ugeskrift for Laeger, Copenhagen, Aug. 7, 1919, Vol. 81, No. 32.]

A review of spastic hemiplegia in general is followed by a descrip-