

region, or else in the cerebellum. Exact surgical intervention is dependent upon the latter. [Author's abstract.]

Ellis, R. S. A QUANTITATIVE STUDY OF THE PURKINJE CELLS IN HUMAN CEREBELLA. [Journal of Comparative Neurology, Vol. 30, No., February 15, 1919.]

In this communication there is presented the results of a study whose main purpose was to show the numerical differences in Purkinje cells in normal, subnormal and senescent human cerebella. To obtain averages the cerebella of four human beings in the prime of life were obtained at autopsy in a general hospital. This gives a close approximation to the condition present in the average cerebellum as it appears in the hospital population, a group probably somewhat below the average for the community at large in the development of the nervous system. Nine cerebella from mental defectives were selected, while from subnormal infants six specimens were examined and the cerebella of five old people were studied as examples of senescent brains. During these studies the cerebellum from a man suffering from paresis was obtained and is included as an example of what may happen in this condition. In cases of extreme mental defect due to agenesis or to the early action of toxins during intra-uterine life, there is an evident deficiency in the number of cells. Similar reductions are found in senescence and paresis. In the subnormal cerebella the evidence indicates that the normal number of cells has never been present in a developed form. In the senescent and paretic cases, however, the small number is due to disintegration. The anterior lobe of the cerebellum shows the greatest deficiency in cells in both the subnormal and senescent cerebella, while the biventral lobe shows the greatest variation in both types of cases, in some greatest loss and in others the least loss. The differences between the two hemispheres average less in subnormal than in normal cerebella. This probably has a relation in the differences in the degree of unilateral dexterity found in normal and subnormal individuals, *i.e.*, the former are usually distinctly right or left handed as compared with the subnormal who tend to be more ambidexterous. The deficiency in cell numbers affords some explanation of motor defects found in subnormal individuals. It shows also that in idiocy and imbecility we may expect to find the whole brain defective rather than the frontal lobes only, while the higher grade of defectives (morons) probably show very slight deviation from the normal.

Eagleton, W. P. CEREBELLAR ABSCESS. [Journal A. M. A., Oct. 4, 1919.]

Eagleton discusses the surgical treatment of cerebellar abscess, and deduces the following conclusions. The distribution of intracerebellar and intrapial arachnoid abscesses in all parts and on all surfaces