

next to man, the central nervous system cannot be said to be similar. In the monkey on division of the cord we find a spastic condition and increased reflexes. Extirpation of certain parts of the cerebral cortex in that animal does not give the same symptoms as are obtained in man, and Ferrier shows how in the monkey the nervous system is not all one nervous unit, while in man it is. For the functions of the nervous system to be carried out in the human subject it is necessary to have complete integrity. When a separation of a part of the central nervous system occurs, death takes place, though it may occur very slowly, but function is at once interfered with. Tone can only exist where integrity is present. Of interest in connection with the central nervous system in man, as above stated, it is necessary that integrity be present for the normal reflex function to be carried on. Dr. Beever reports the case of a child six weeks old, where the spinal cord below the sixth cervical segment was destroyed and possessed no recognizable living nerve element between the two parts. Yet, the self action of the centres of the bladder and rectum seemed to be retained. Spontaneous evacuation of the bladder took place resembling periodically and otherwise reflex evacuation. This case shows, I think, that in very young children the nervous system has more resemblance to that of the lower animals. The stimuli not reaching the cell bodies of the lower motor neurones in the anterior horns; "isolation alteration," as it is called by Collier, takes place, with the result that we get secondary changes in the cell bodies, which later on give reaction of degeneration in the muscles.

In the same way isolation alteration takes place in the anterior horn cells when we have the lower sensory neurone involved, as, for instance, in tabes, which gives us an absence of reflexes, due to lessened tone in the muscles; but here we do not find reaction of degeneration in the muscles. Why? Because it is impossible to have all the posterior roots involved, which is necessary before we can get it, while in cord pressure, which is great enough to produce abolition of all the stimuli coming down in the motor and going up the sensory, being equivalent to transverse division of the cord, the stimuli to the anterior horn cells below the site of the pressure is done away with, and we have those cells undergoing isolation alteration changes. If pressure is removed, sensation returns first, then motion, followed by normal response to faradic irritability, and last of all the reflexes.

I shall now deal with Pressure on the Brain from the results of accident or depressed fracture, or Pressure from a Hæmorrhage or a Cerebral neoplasm. The first clinical symptom manifested, especially when the pressure affects the motor cortex, is irritation, as expressed by Jacksonian epilepsy, which is, followed by paresis or paralysis, with increased