

more marked at the point of contrecoup than at the point of application of violence. If the place of contrecoup is at the foramen magnum then a lesion of the cord does not occur. Apart from the localities of coup and contrecoup the extent of contusion is also determined by the varying consistency of the cord itself. The motion imparted to the cord by a blow is transmitted chiefly in the direction of the blow through the cord, losing in intensity as it proceeds from the point of impact; small waves also start radially from this point. The amount of contusion is proportional to the degree of trauma, the distance from its point of application and the resistance offered by the various tissue elements. The least resistant tissue is the nervous tissue; the blood vessels are the most resistant. Only in the case of opening up of the central canal does a flow of lymph have any destructive rôle. Central hemorrhages occur only with a damage of the nervous tissue, and only when the central veins are in the direction of the line of injury. Thrombosis has little to do with the genesis of traumatic lesions of the cord. The vascular changes appear to cause only late forms of spinal apoplexy. As the results of the study of the process of regeneration in the spinal cord the author notes the following: The regenerative phenomena following experimental lesions of the cord in animals are not as marked as those following compression of the cord in human beings. Section of the white substance between the anterior horns and the periphery is followed by regeneration of reserve fibers above and below the point of section. A regeneration of ganglion cells in the cord has not yet been observed. Regeneration of nerve fibers occurs in many diverse diseases of the cord, whether the disease has already run its course or whether it is slowly developing, it occurs in traumatism, compressions, syringomyelia and in transverse and disseminate myelitis. It does not occur in the columnar degenerations and in multiple sclerosis. In order that regeneration may occur it is necessary that the ganglion cell should be intact. The first evidence of regeneration is seen one week after the section, and this process proceeds slowly. Only a comparatively small number of fibers are restored. The functional result is not a very considerable one. The best conditions for a restoration of function in the anterior part of the cord are afforded by compression, which leaves intact the central veins and the general configuration of the cord. A regeneration proceeding from the posterior roots in compression has not yet been found, and probably can not occur, since the cause of injury of the cord is a caries of the vertebrae, which causes tuberculous ulceration of the ganglia on the posterior roots; in which case no regeneration can occur.

JELLIFFE.

FUNCTIONAL PSYCHOSES. E. Mendel (Deut. Med. Woch., xxxi., No. 44).

The author emphasizes the importance of medical watchfulness for the children of nervous parents, and of careful regulation of the manner of living, especially if the children show any nervous tendency. It is often wise, especially as puberty approaches, to take such children away from a home where the atmosphere is not favorable for combating the tendency and place them in the country or in a small town, where the life will be simpler. Their diet should consist largely of eggs, milk and fruit. In case of sleeplessness drugs should be a last resort after massage and hydrotherapeutic measures have been thoroughly tried. A patient who refuses food may sometimes be tempted to eat when unobserved if a glass of milk or crackers and bouillon are left on a table near his bed. Patients who soil themselves should be taken to the closet frequently, and the amount of fluid ingested restricted. For melancholia he depends chiefly upon opium, gradually increasing the doses and then decreasing. His maximum dose is 1 gm., supplemented by rest in bed and strengthening diet.

JELLIFFE.