

Virchow-Robin spaces and the sub-arachnoid spaces are found filled with blood-pigment, which can be demonstrated in the spinal fluid. In embolism and thrombosis of cerebral vessels the spinal fluid always gives a negative benzidine reaction ; in cerebral hæmorrhage this reaction is always positive.

The subarachnoid space is a receptacle for the waste products discharged by the parenchyma of the brain and spinal cord. The presence or absence of the Lange test, the positive or negative Wassermann, the presence or absence of the globulin and similar reactions can be understood only on the assumption that the cerebro-spinal fluid is a direct product of the nerve tissues themselves. The cerebro-spinal fluid then originates in the central nervous system, is discharged *viâ* the Virchow-Robin spaces into the subarachnoid spaces and the ventricles, and is absorbed in the former by the arachnoid villi, in the latter by the choroid plexus.

G. W. T. H. FLEMING.

*Reflexes of Different Order elicitable from the Abdominal Region.*  
(*Arch. of Neur. and Psychiat.*, June, 1925.) Monrad-Krohn,  
G. H.

Krohn draws attention to the fact that every reflex contraction of the abdominal wall must not be regarded as identical with the normal cutaneous abdominal reflex. There is a periosteal reflex of the costal margin, elicitable by percussion of the costal border, internal to the mammillary line. This reflex consists in the contraction of the abdominal muscles with deviation of the umbilicus towards the point of percussion. In a great majority of cases, when the cutaneous abdominal reflex is abolished in a pyramidal lesion, the costal reflex is brisk and may even be exaggerated. The abdominal reflex described by Dejerine and Long in a case of complete transverse lesion of the spinal cord, Krohn considers might have been a pathological type of abdominal reflex.

Krohn himself describes a similar reflex in a case of right hemiplegia in which there was a flexion of the homolateral limbs. It appeared after a longer interval; the contralateral muscles occasionally contracted more forcibly than the homolateral muscles, causing deviation of the umbilicus and linea alba to the left. The stimulus required to elicit this bilateral reflex was much stronger than that required to elicit the normal reflex from the right side. The tickling sensation that accompanied the normal left abdominal reflex was absent. This reflex undoubtedly belongs to the order of reflexes of spinal (mesencephalic) automatism. The pathological reflex is rather a "retraction reflex," the normal one is a "unilateral deviation reflex."

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*Behaviour of the Plantar Reflex in Jacksonian Epilepsy.* (*Arch. of Neur. and Psychiat.*, May, 1925.) Tournay, A.

Tournay, after studying two cases of Jacksonian epilepsy, concluded that the plantar reflex may behave in various ways in the course of Jacksonian epilepsy :