

or excitement at once sends the pressure up, and Nawratski and Arndt found the column to rise to 800 mm. during an epileptic fit in a case where it had previously been normal. If the patient's head be passively raised, and much more so if he be raised to a sitting posture, the pressure will rise very much. This rise is of course of hydrostatic nature. Theoretically the difference here should be about 600 mms., that being about the average height of the top of the cranial above the point of lumbar puncture, but, owing to the fact that the skull is a closed and rigid cavity, this amount of change does not occur. Kronig found that about 40 per cent. of the total height registered, and we found that it varied between 154 and 334, and the average (in 9 cases) was 256.7, which is 42.8 per cent. of the average 600 mms..

The fluctuations in the pressure due to the respiration and pulse are, according to Henneberg, only *transmitted* to the lower dorsal space, and hence when they are absent this absence is a valuable distinguishing point between myelitis and compression myelitis.

Without going into the very complicated question of what keeps up the normal pressure of the cerebro-spinal fluid, one may say that it depends upon the relation between secretion and absorption, and also upon the amount of solid contents. For example, if a large cerebral abscess rapidly form, this would tend to increase the total pressure within the cranio-spinal cavity. Compensation will be attempted here by either increased absorption or decreased secretion or both, but such compensation is often insufficient, and we have a pathologically raised pressure within the cavity of the skull and spine.

The communication between the subarachnoid spaces in the skull and the spine is normally so free that any increased pressure is soon equally distributed, and can hence be measured in the lumbar region. If, however, as sometimes happens, the communication between the two cavities is mechanically interfered with there may exist within the cranium a high pressure while within the spinal cavity this may be low, and in such a case lumbar measurements are of no avail. If, however the fontanelles be open and are bulging, showing an increased intra-cranial pressure, and yet the pressure in the lumbar region be low, then we could argue that there must be some mechanical obstruction about the foramen magnum due perhaps to meningeal thickening or some other structural cause.