DIAGNOSIS OF TUBERCULOUS MENINGITIS BY LUMBAR PUNCTURE. M. Variot (La Presse Médicale, June 10, 1903).

The author claims that in the cytological examination of the cerebrospinal fluid, we are now in the possession of a method of investigation truly scientific to establish the diagnosis so often doubtful of meningeal tuberculosis, and even if therapeutically few results are attained by it, at least no harm is done. The presence of lymphocytes in abundance in the cerebrospinal fluid, indicate at least in infants, a meningeal reaction that is associated with the development of microorganisms. On the contrary, experience teaches us that the predominance of polynuclears in the cerebrospinal fluid corresponds with other meningeal conditions of a more benign type, which are more distinctly curable. The writer is able from twenty cases of meningeal tuberculosis, controlled by autopsy to speak positively. In 13 cases a pure lymphocytosis existed; in six cases a lymphocytosis predominated, one case showed an equal number of polynuclear leucocytes and lymphocytes. These cases presented the lesions of a tubercular meningitis with purulent exudate. Six cases of cerebrospinal meningitis showed a predominance of polynuclears. In 14 cases where for various reasons a bacillary meningitis was suspected, lumbar puncture never gave a lymphocytosis, and the cases cleared up without leaving traces. It is a negative control of wonderful value. The technic of the operation is simple; in the space between the 4th and 5th lumbar vertebræ puncture is made, and from 10 to 20 cc. of cerebrospinal fluid is drawn, either through a canula or a syringe. The liquid is received into a funnel-shaped tube, and centrifuged. The sediment is dried on a slide in an oven, and fixed with alcohol ether, and stained with hemateine and eosin or Unna's methylene blue, or thionine, or Ehrlich's triacid mixture. Hunting for Koch's bacillus is a much longer procedure and is uncertain. NOYES.

MENINGEAL HEMORRHAGE. Widal (La Presse Médicale, June 3, 1903).

Prof. Widal, writing of the diagnosis of meningeal hemorrhage, that it has become a fairly simple matter to distinguish this condition which formerly was very obscure. Kernig's sign demonstrates the presence of meningitis, and lumbar puncture by demonstrating the blood in the cerebrospinal fluid, proves the hemorrhagic origin. A case of a woman aged thirty-nine years is mentioned. She had an apoplectic attack, following intense headache, localized in the back of the neck, and vomiting. She was seen in the hospital in a state of semi stupor. Motor and sensory symptoms were negative, except a slight convergent strabismus of the right eye, and a slight ptosis. The knee-jerk was absent on the right side. Stiffness of the neck and Kernig's sign, the inability to produce full extension of the knee were both present. The diagnosis lay between tuberculous and syphilitic meningitis, hemorrhage in the meninges or hysteria. Lumbar puncture showed a cerebrospinal fluid, with a few red corpuscles and a uniform yellow tint which could not have come from traumatism of the needle. Death ensued by a second hemorrhage. Autopsy showed a hemorrhage under the arachnoid, arising from a ruptured aneurism, with blood collected below the right frontal lobe, between the brain and pia mater. The clot had lacerated some of the cerebral tissue, and was closely adherent to it. The aneurism had developed from one of the anterior branches of the right Sylvian artery which was atheromatous, and the clot had plugged the opening in the vessel. The final hemorrhage had broken into the ventricle. Kernig's sign existed in this case though there was no involvement of the spinal cord, or general meningitis. There were three lumbar punctures made; the first showed no cells of any sort, the second two days later, showed a few red corpuscles, and a considerable number of polynuclears, well formed. The third puncture, five days later, contained red cells, some