

Though Koplik found them more frequent in children, in none of our cases were the children very young, eight years being the youngest. They may come on just before death. Coming on late in the disease convulsions always suggest the possibility of hydrocephalus, with a view to lumbar puncture.

*Paralysis and Paresis.*—Apart from the affection of the ocular muscles paralysis was not frequently seen, being present in only 6 per cent. of this series. One side of the face was most often affected, but a definite hemiplegia with aphasia may be seen. These cases may present the typical picture of cerebral hæmorrhage, but the associated leucocytosis and lumbar puncture will clear up the diagnosis.

Paresis may also occur in the face, or one or more extremities. Gowers explains hemiplegia in these cases as due to a focus of intense inflammation over the motor area of the brain.

*Reflexes.*—The finding of the reflexes, both superficial and deep, will vary according to the stage of the disease when the examination is made. In early cases the reflexes are usually present or increased but are apt to disappear later on. Strumpell found the tendon reactions absent in five of 32 cases; in three they disappeared to reappear in convalescence. Babinski's reflex may be present in meningitis and Koplik reports it in 4 of 25 cases in the New York epidemic. In our own series the reflex findings are very variable.

*Kernig's Sign.*—In 1882 Kernig of St. Petersburg found a symptom which he thought pathognomic of meningitis, namely, the inability to extend the leg when the thigh was placed at right angles to the trunk. Since his publication our findings have compelled us to modify this view and we must state that Kernig's sign is not pathognomic of meningitis, being found also in pneumonia and typhoid fever, and may be present at the very onset of any illness in young children, but is nevertheless a very valuable symptom of meningitis.

In this series Kernig's sign was present in 33 cases of 46 (71 per cent.) and was definitely absent in two cases (1 per cent.) and was not reported in the remaining 11 cases. It was frequently absent at the onset, and did not appear till from the 2nd to 5th day. Its duration is variable, the longest case showing its constant presence for 30 days. Kernig states it was present in convalescence, but in this series the symptom always disappeared at the onset of convalescence.

Of the two cases in which Kernig's sign was absent, one was a fulminant case which died in 18 hours and the other a mild form where the patient recovered.

Gowers in his last edition 1907 does not mention this symptom in his article on Epidemic Meningitis. As to causation—the theory that