Short Notes and Clinical Cases.

CASE OF INFLUENZAL MENINGITIS: RECOVERY AFTER REPEATED LUMBAR PUNCTURE.

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A SCHOOLBOY, A. M., age 14, was admitted to the General Hospital, Bristol, under the care of Dr. Carey Coombs, on Jan. 26, 1922, complaining of headache and vomiting.

Fourteen days before admission he had a severe cold and headache which confined him to bed for two days. He was up during the next two days, feeling fairly well. About this time he hit his head against a post, and developed severe headache and vomiting. The latter symptom increased in severity; he could take no food, and became febrile. The doctor attending him diagnosed meningitis, and he was admitted to hospital. He had always been healthy previous to the present illness. There was nothing of note in his family history.

ON ADMISSION.—Patient was quite conscious. Temperature 100°, pulse 60, respiration 20. Complained of pain, referred to frontal and occipital regions. Marked photophobia. Head was held slightly extended on trunk, and posterior cervical muscles were very definitely rigid. All superficial and deep reflexes were present and normal. Plantar reflex, flexor. Pupils were dilated, reactions normal. Kernig's sign was positive. Optic discs, normal. Organs of chest and abdomen, normal. Lumbar puncture was performed on the day of admission; the fluid was under pressure. It showed a slight general turbidity (corresponding roughly to a suspension of 500 million *B. typhosus* per c.c.). The turbidity was due to a uniform suspension of fine white particles. On standing it deposited a voluminous, delicate, pearl-grey clot. It contained 2200 cells per c.mm. Of these, 85 per cent were polymorphonuclear leucocytes, 10 per cent were lymphocytes, and 5 per cent were large mononuclear cells. No organisms were seen in films. No tubercle bacilli were found after repeated examinations. Four blood-agar plates inoculated heavily with the deposit grew five colonies of an organism indistinguishable

from *B. influenzae*. There was no growth on plain nutrient agar, inspissated serum, or serum agar. The course of the disease will be seen from the following temperature chart:—

FIG. 1.—Temperature chart showing course of the disease and the effect of repeated lumbar punctures.

The temperature often started rising about 2 p.m., reaching a maximum about 6 p.m., when it would often begin to fall. Meningeal symptoms were present until March 9, and were greatly exaggerated during the bouts of high temperature. When the temperature was high there was intense photophobia, severe headache, neck rigidity, and dulling of consciousness. The room had to be darkened for the first symptom, and the boy was terrified lest his visitors should raise the blind. When the temperature fell, and until it again began to rise, an extraordinary amelioration of all symptoms took place, only the neck rigidity persisting to any extent. The cerebrospinal fluid withdrawn on Feb. 16 was less turbid than on the first occasion, but a fairly copious growth of *B. influenzae* was obtained on blood media.

Meningeal symptoms had disappeared entirely by March 21, and recovery was apparently complete in every way.

In this connection the fact that the patient was treated by lumbar puncture frequently repeated (*see Chart*) is worthy of notice.