on both sides. Abdominal reflexes normal. Knee jerks normal. Elbow jerks normal. Plantar reflexes normal. No ankle clonus. No spastic or paralytic condition or wasting of any muscle found.

X-Ray Examination (see attached photograph).—Lateral view shows marked enlargement of pituitary fossa. The bones of the skull are somewhat thicker and more massive than normal. The actual measurements of the fossa on the plate are twenty-two millimetres antero-posteriorly, twelve millimetres vertically. The appearance suggests that the pituitary fossa is enlarged by a cyst and has pressed on the left side of the optic tract. The actual outline of the bony portion of the fossa is perfectly clear, which seems to point to absence of any invading neoplasm.

Hands and Feet.—The hands and feet are both rather large and massive-looking but the patient had not himself noticed anything until his attention had been drawn to them. His boots had become tighter but he had not had to change the size. In the standing position his fingers hung to within three inches of the knee-joint.

His general appearance is one of heavy build and large bones without any very definitely marked point to go upon. Comparison with an old photograph showed this. As can be seen from the X-ray the jaw is large and solid. As nothing definite could be done for the man here, he was invalided with a view to possible operative treatment in England.

The case appeared to be of interest for the following points:

(1) The Sudden Onset.—This appears to be absolutely definite and to coincide with an attack of acute diarrhea. The age incidence is the normal one and the onset is often associated with some definite illness such as in this case. The type of illness appears to vary and presumably a condition of generally lowered metabolism may lead to lack of certain essential salts causing a final upset in the metabolism of the pituitary gland and an abnormal secretion of the anterior part.

(2) The Prognosis and Possible Treatment.—No attempt was made to treat with glandular extracts as no certain results appear to have been obtained. As regards operative treatment the earliness of the condition and the small present local change suggest the possibility of cure, but as these cases may live in comparative comfort many years it seemed that symptomatic treatment would be the best.

ACUTE MENINGITIS OF UNCERTAIN ORIGIN.

BY LIEUTENANT-COLONEL J. L. WOOD.
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This short paper was written at the request of Sir John Rose Bradford, who very kindly took an interest in a number of cases which passed through the hands of several medical officers of the local Isolation Hospital.

As the last of these medical officers, I have embodied their observations in this note. The histories and temperature charts of all these cases have been kept and I believe they were aborted cases of cerebrospinal fever. The cases all came under our observation as suspected cerebrospinal fever; they were characterized by a sudden onset of severe headache not necessarily frontal or occipital; vomiting, a stiff neck, a positive Kernig, pyrexia of varying degree—usually brief, slow pulse,
furred tongue, no rash, no herpes, no disturbances of the sensory or motor nerves, no difficulty of micturition. The positive signs and symptoms were marked and did not differ from those seen in cerebrospinal fever, except with regard to Kernig sign; in this the locking of the knee-joints seemed rather of an elastic nature, than the rigidity of ankylosis. On lumbar puncture, there was a ready flow of clear limpid fluid under considerable pressure, and 60, 80 or 100 cubic centimetres was not an unusual quantity to draw off. The character of the fluid reminded one of gin, and we always called these cases “gin-clear” meningitis. The name “gin-clear” is always applied by fishermen to the crystal clearness of a north-country trout stream in August drought. The fluid in tubercular meningitis cases has been called clear, but it is a muddy fluid compared to that I have described. The cell elements in the fluid were very few and indicated nothing; all cultures, aerobic and anaerobic, failed. Only on very rare occasions did the fluid reduce Fehling’s solution, or decolorize potassium permanganate solution.

The effect of lumbar puncture was to alleviate the headache directly, and in no case was it required more than three times, and in every case the patient recovered—I am sure post hoc, not propter hoc.

It is of interest to note that after chloroform these cases vomited, the cerebrospinal fever cases did not. The cases never showed the presence of a meningococcus in the posterior nares and agglutinins for meningococci were not present in the blood; Captain Wilson, who did a lot of work on the immunity reactions of some of the cases, found no scientific grounds for regarding them as meningococcal infections.

The cases did not resemble trench fever and were not meningitis or meningismus associated with any of the enteric group, as far as we could prove by blood culture and agglutination tests.

Martin Flack, in his report on the cases seen by him in 1915, in London, found thirty-three per cent had a clear cerebrospinal fluid—and of these two-thirds gave no growth of coccus—but he obtained a growth from the nasopharynx; indeed in every case, except one, where this procedure was adopted the coccus was found. All his “clear fluid” cases recovered except one, of whom there are no further details.

In the Local Government Board Report on cerebrospinal fever for 1916, Dr. Bruce Low reports on the prevalence and distribution of cerebrospinal meningitis during recent years. He speaks of many small epidemics in which no bacteriological work was done; he then goes on to describe an outbreak at Irthlingborough in Northamptonshire:

“An outbreak, comprising about thirty marked cases, at Irthlingborough, a small town in Northamptonshire, was brought to the notice of the Local Government Board in 1905. There were also in this instance, co-incidentally with the unequivocal cases, several others of anomalous sort, most among persons who had been in direct contact with one or other of the patients who were seriously ill. These anomalous cases resembled acute influenza, and all recovered. In this outbreak resort was had to bacteriological investigation, which was conducted on behalf of the Board by an expert, Dr. Mervyn Gordon, who found in the nasal mucus, or in the cerebrospinal fluid, the meningococcus of Weichselbaum; so that the diagnosis of cerebrospinal fever was established beyond dispute. This is the more interesting from the fact that the serious cases and those with only
influenza-like symptoms, occurred side by side, both classes of cases being apparently due to the same meningococcal infection."

I regard my cases as aborted cases of cerebrospinal fever because in the first place they looked the part clinically, and apparently appeared so to other observers, who sent them to us. In the second place the incidence of these cases synchronized with the incidence of cerebrospinal fever, as is shown in the accompanying charts. One hypothesis would be that these are aborted attacks in which there is toxemia—either with or without septicemia, probably without. The toxemia produces all the common physical signs. That these are due to the toxemia is borne out by their occurrence in fulminating cases, with very slight meningeal involvement, and in pneumonia with meningism.

A case of meningitis with pus may give a "gin-clear" fluid on lumbar puncture. I had a case of pneumococcal meningitis, which died after three "gin-clear" punctures had been done. Post-mortem, the base of the brain was covered with a thick yellow pus containing pneumococci. Until the post-mortem findings I had thought that at least a "gin-clear" case had died and we might get some positive evidence of the state of the brain, but in this we were still disappointed.