Clinical and other Notes.

PNEUMOCOCCAL MENINGITIS—RECOVERY FOLLOWING TREATMENT WITH PRONTOSIL SOLUBLE.

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There is already a considerable amount of literature available on the subject of the benzene sulphonamide group of drugs, but the following account may prove of interest, taking into consideration the very high mortality of pneumococcal meningitis prior to the introduction of the sulphonamides.

I was called out on the evening of July 18 last to see a native child, aged 8, living in very poor conditions in the local "bazaar." The uncle of the child gave me a history of one day's illness with neck rigidity, severe headaches and irritability. On examination of the child these statements were confirmed, Kernig's sign was found to be positive, the temperature being 104.8°F., pulse 120, and respirations 26.

Lumbar puncture was performed under conditions as sterile as the circumstances permitted. The cerebrospinal fluid was under considerable pressure and had a hazy appearance. Ten cubic centimetres of antimeningococcal serum were injected intrathecally as a precautionary measure, and a blood slide was taken.

Examination of the cerebrospinal fluid showed numerous polymorphonuclear leucocytes and lymphocytes. The cell count was 250. No organism could be seen with the use of any of the ordinary stains—Gram's, Leishman's, Ziehl-Neelsen's—even after centrifuging. The blood slide showed polymorphonuclear leucocytes 85 per cent, lymphocytes 13 per cent, eosinophils and mast cells 2 per cent. The total white count was 18,000.

The child was seen again at 1 p.m. on the 19th. Temperature was 103.4°F., pulse 136, and respirations 24. The headaches were still very severe and the child could only be roused with difficulty.

Lumbar puncture was again performed, and the cerebrospinal fluid was found to be still under considerable pressure and hazy; 2 cubic centimetres of prontosil soluble were injected intrathecally and 3 cubic centimetres intramuscularly.

Examination of the cerebrospinal fluid was repeated and showed again numerous polymorphonuclear leucocytes and lymphocytes. The cell count
was 280. Several slides were stained with Gram’s or Leishman’s stain and all showed distinctive lanceolate diplococci. No streptococci, meningococci or tubercle bacilli could be seen, and the case was diagnosed pneumococcal meningitis.

The above procedure—2 cubic centimetres of prontosil soluble intrathecially following lumbar puncture and 3 cubic centimetres intramuscularly—was repeated daily until the tenth day. During this time the child showed gradual improvement. No cyanosis, nausea, etc., or other toxic symptoms were noticed. By the tenth day the neck rigidity had disappeared, the headaches were no longer troublesome and the child was sufficiently well to resent the lumbar puncture. On the morning of the tenth day the temperature was normal and the evening temperature 100°F.; pulse 96 and respirations 21.

The cerebrospinal fluid (which retained the red colour of the prontosil soluble only slightly from day to day) became less hazy and by the tenth day was clear. Polymorphonuclear leucocytes and lymphocytes were scanty—cell count 5. No organisms were seen in films stained with Gram’s or Leishman’s stain.

The blood slide showed polymorphonuclear leucocytes 73 per cent, lymphocytes 23 per cent, eosinophils 3 per cent and mast cells 1 per cent. The total white count was 10,000.

The prontosil soluble was stopped after the tenth day, when a total dosage of 50 cubic centimetres of the 5 per cent solution had been given.

On the eleventh day—July 29—I received a note from the uncle of the child stating that as she was now out of danger, they had decided to hand the case over to a local “hakim.” Six weeks later the child had almost completely recovered.

According to the medical literature available, there are very few recorded cases of recovery in pneumococcal meningitis. Dr. Freida Young, of Wolverhampton, recorded a case in the British Medical Journal of August 6, 1938.

I was unable to trace any contact with any case of pneumonia, nor had the child any previous history of nose, ear, or chest trouble.

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