Case History

The patient, an unmarried woman aged 21, was first seen by her doctor on Aug. 22, 1947, having returned on Aug. 19 from a holiday in Jersey, where she spent Aug. 16 in bed with headache, diarrhoea, and vomiting. The headache had persisted, and the doctor's view on the 22nd was that the patient was clinically likely to be suffering from typhoid fever. Next day he therefore requested the county laboratory to undertake a blood culture. At that time the patient's bowels were constipated. Pyrexia, lassitude, and headache persisted for a further nine days. There was no rash and the spleen was never palpable. The temperature chart is here shown; the pulse was

Temperature chart of case.

of the order of 70 to 80 throughout. The headache, associated as it was with stiffness of the neck muscles and the incidence of an outbreak of poliomyelitis at the time, brought in the exclusion of that condition as a further problem. There was no history of the patient having had dried egg in a form she was able to recognize, but she had partaken of salad dressings while on holiday.

We withdrew 20 ml. of blood: 5 ml. was put into 100 ml. of bile-salt broth, 5 ml. into 100 ml. of glucose-proteose peptone No. 3 which contained "liquoid" and para-aminobenzoic acid, 5 ml. into Wintrobe mixture, and 5 ml. of clotted blood was used for the Widal test. Growth appeared in the glucose-proteose after 48 hours' incubation. No growth appeared in the bile-salt broth. Subculture produced a non-lactose-fermenting Gram-negative bacillus which was motile and grew freely in taurocholate media.

Acid and gas developed in glucose, maltose, mannite, and dulcitol—all within 24 hours. There was no reaction in lactose, saccharose, or salicin, but a slight acid reaction in litmus milk. The indole test was negative. Gelatin was not liquefied.

Agglutination reactions: polyvalent *Salmonella A*, negative; polyvalent *Salmonella B*, negative; polyvalent *Salmonella C*, positive titre 1 in 250; *paratyphosum C "O"*, positive titre 1 in 50. An organism isolated from the stools on Aug. 23, 24, 30, and Sept. 5 and 29 produced identical results. The first negative result was obtained on Oct. 25, and all three subsequent stools were negative. The organisms recovered from the blood and faeces were confirmed by Dr. Joan Taylor as conforming to *Salm. oranienburg*.

A blood count on Aug. 23 showed: haemoglobin, 92%; red cells, 4,630,000; leucocytes, 6,600 (polymorphs: neutrophils 70%, monocytes 4%, lymphocytes 26%). Urine taken on Aug. 23 was negative biochemically and bacteriologically. Widal reactions were negative.

Discussion

Kerrin *et al.* (1935) give a similar clinical story of their case, but hypostatic pneumonia and death occurred. Their blood culture was positive in taurocholate media. Cooper's (1944) patient presented as a case of gastro-enteritis with continuing pyrexia. This case also continued to excrete the organisms for at least 55 days. In our own case it is reasonable to suppose that infectivity of the faeces ceased midway between Sept. 29 and Oct. 25—about 40 to 50 days after the organism was first detected on Aug. 23.

Summary

A further example of the isolation of *Salm. oranienburg* from blood is recorded.

The value of blood culture in cases of pyrexia of unknown origin is re-emphasized.

The discovery by the same laboratory of two cases of blood infection with this organism draws attention to the occurrence of septicaemia in at least a proportion of salmonella infections.

REFERENCES

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Medical Memoranda

Nitrogen Mustard in Polycythaemia Vera

Since Wilkinson and Fletcher (1947) reported the results of treatment of three cases of polycythaemia vera with nitrogen mustard the opportunity for treating a further case has occurred.

CASE REPORT

The patient, a woman aged 51, had been a known sufferer from this condition since she had been admitted under the care of Professor Nattrass in 1935. At that time she complained of high facial colouring of four years' duration, with pain in the left side and nausea, dyspnoea, and palpitation of two years' duration. The haemoglobin was 106% (Haldane), the red blood cells

the white cells had risen from 12,000 to 36,000 per c.m.m.

The patient was given methyl-bis(β-chlorethyl)amine hydrochloride intravenously in doses of 0.1 mg. per kg. of body weight on the 3rd, 8th, 19th, 23rd, 28th, 37th, 43rd, 57th, and 64th days after coming under observation. Apart from nausea and vomiting, which came on three hours after each injection and lasted for two to three hours, no untoward side-effects of the treatment were encountered. As will be seen from the charts, the haemoglobin level and the red and the white blood cell counts dropped during the first month and thereafter there was a pronounced tendency for these values to increase in spite of treatment. There was no significant alteration in the size of the spleen during the three-months period of observation. The patient stated that she experienced slight alleviation of her symptoms during the first two months.

This case falls into line with two of the three cases of polycythaemia vera in Wilkinson's series in which the therapeutic response to nitrogen mustard was unsatisfactory.

I wish to thank Professor Nattrass, Royal Victoria Infirmary, Newcastle-upon-Tyne, for permission to publish this case, and Dr. W. A. R. Thomson, of Boots Pure Drug Co., Ltd., for the supplies of nitrogen mustard.

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REFERENCE

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