unaltered or became worse. The aggravation of the pain may have been due to the treatment, for two patients who had no abdominal pain or discomfort prior to penthienate therapy developed it while taking the drug.

Enuresis was noted in nine children. The response of this condition to penthienate was recorded: only one gained normal bladder control, in seven control of the bladder improved, and in one it remained unchanged. It would therefore seem that both abdominal pain and enuresis, when associated with either lenteric diarrhoea or encopresis, are likely to be alleviated by this treatment.

COMMENT

This paper does not describe a scientifically controlled investigation. Neither the methods of diagnosis of the conditions nor those of assessing the results of treatment fulfil the necessary conditions. Nevertheless, from a clinical point of view it is apparent that treatment of lenteric diarrhoea and faecal incontinence with penthienate leads to a marked improvement in most cases. The drug appears to be more effective than older methods of treatment, and when used alone or in conjunction with other remedies constitutes a definite advance in the treatment of these conditions.

R. A. MILLER, M.D., Ph.D., F.R.C.P.Ed.,
Assistant Physician, Royal Hospital for Sick
Children, Edinburgh.

REFERENCE

Ingegno, A. P. (1954). *Ann. N.Y. Acad. Sci.*, 58, 463.

ADDENDUM.—Since this memorandum was submitted for publication three further cases of encopresis and diarrhoea have been treated with penthienate methobromide. In one the encopresis was abolished and in the other two it was greatly improved. The diarrhoea subsided in each case.

Resistant Staphylococcal Puerperal Septicaemia Susceptible to Vancomycin

The resistant staphylococcus has for some time been a commonplace in the hospital nursery, and has lately invaded the general surgical wards, causing severe, sometimes fatal, damage. Its spread to the parturient mother, though not yet generally publicized, is obviously only a matter of time, and with this in mind we have thought it might be useful to record our recent experience with such a case.

CASE REPORT

The patient, a 10-para aged 40, was admitted to hospital with ruptured membranes on February 3, 1958, 11 weeks before the expected date of delivery. She continued to drain clear liquor, but as labour did not begin spontaneously antibiotic therapy was instituted after two days with "crystamycin," 1 g. twice daily. There was no change until nine days later, when the patient suddenly complained of severe malaise, and had a rigor with a temperature of 104° F. (40° C.). As the symptoms pointed to an infection of the urinary tract treatment was changed to "sulphatriad" and potassium citrate in high dosage, but, despite the persistence of pyrexia, this was discontinued when the result of urine examination proved negative. Labour began the same evening. The foetal heart sounds had disappeared four hours previously. She was delivered five hours later of a stillborn foetus of 4 lb. 15 oz. (2,210 g.) showing early maceration. The delivery was spontaneous, with a normal and complete third stage. Oxytetracycline ("terramycin"), 250 mg., was given six-hourly, together with vitamin-B complex in high dosage, and the temperature remained normal over the next two days. It then suddenly shot up again, rapidly becoming established as a high fever ranging between 103 and 106° F. (38.9 and 41.1° C.) with subnormal intermissions. The clinical picture was that of a typical septicaemia with recurrent rigors, physical deterioration, liver enlargement, and anaemia. A vaginal swab and repeated blood cultures yielded a profuse growth of *Staphylococcus aureus* resistant to penicillin but sensitive to chloramphenicol and erythromycin. Appropriate combined chemotherapy, details of which are shown in the accompanying Chart, failed to produce any improvement; the septicaemic condition continued unchecked and there

was clinical evidence of localization in the liver and on the heart valves as shown by hepatomegaly, and a harsh apical systolic murmur conducted into the axilla. The general condition of the patient rapidly deteriorated, with increasing hepatomegaly and incipient endocarditis, the E.S.R. remained high between 35 and 40 mm. (Westergren), the Hb percentage diminished from 84 to 57, and the cells showed marked toxic granulation.

At this stage it was decided to try the effect of the new antibiotic vancomycin, and, though not yet commercially available, a supply was obtained from the makers. The

result was immediate and dramatic. After the second eight-hourly intravenous injection of 500 mg., the temperature fell to normal, and, except for a small peak the following day, remained permanently subnormal. Blood cultures became sterile after three days, and the blood picture returned to normal. All the clinical signs and symptoms regressed rapidly and completely, and there was no remission when the drug was discontinued after 10 days, the patient leaving hospital very fit and well after a further 10 days.

COMMENT

Vancomycin is a new antibiotic produced from *Streptomyces orientalis*, an organism found in some Indonesian soils. Fairbrother and Williams (1956) have shown that it is lethal *in vitro* to most strains of *Staph. aureus* resistant to other antibiotics. More important, bacterial resistance to it is apparently unknown (Garrod and Waterworth, 1956). Only a small number of clinical cases have so far been treated (Kirby and Divilbiss, 1957; Griffith and Peck, 1956), but its value, though still largely undocumented, appears to be established, and it would seem the ideal counter to the increasing bugbear of the resistant staphylococcus. It unfortunately has one grave disadvantage—that it can be administered only by the intravenous route.

Vancomycin is manufactured under the trade name of "Vancocin" by Eli Lilly and Co. Ltd., and we are much indebted to Mr. Cooke, of this firm, for a generous supply of the drug. We also thank Mr. A. Dickson Wright and Dr. Geoffrey Konstam for clinical advice and help.

ALBERT DAVIS, M.D., Ch.M., F.R.C.S., M.R.C.O.G.,
Consultant Obstetrician, Bearsted Memorial Hospital.

A. MELVIN RAMSAY, M.A., M.D.,
Consultant Physician for Infectious Diseases, Royal Free Hospital.

A. J. MANN, M.B., B.S.,
Senior House Officer, Bearsted Memorial Hospital.

REFERENCES

- Fairbrother, R. W., and Williams, B. L. (1956). *Lancet*, 2, 1177.
Garrod, L. P., and Waterworth, P. M. (1956). *Brit. med. J.*, 2, 61.
Griffith, R. S., and Peck, F. B. (1956). *Antibiotics Annual, 1955-56*, p. 619.
Med. Encyclopaedia Inc., N.Y.
Kirby, W. M. M., and Divilbiss, C. L. (1957). *Ibid.*, 1956-57, p. 107.