

CLINICAL NOTE.

A CLINICAL NOTE ON A RAPID METHOD OF DIAGNOSING
BACILLARY DYSENTERY.

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THE following method of rapidly establishing the diagnosis of Bacillary Dysentery has been used at this hospital for the past sixteen years. It is reliable and simple. The technique allows for the transfer of material direct from the infected person to the laboratory medium and obviates waiting for specimens of patients' excreta to become available.

Apparatus.

Test-tubes 8 in. by $1\frac{1}{4}$ in. fitted with corks (for swabs). Test-tubes 5 in. by $\frac{9}{16}$ in. with cotton-wool plugs (for medium). Flexible indiarubber vaginal douche nozzles as used with enema syringes (the swabs).

Media.

Nutrient broth and MacConkey's bile-salt-lactose-agar.

Method.

The sterile swabs are stored in batches of four in sterile water in the large test-tubes (a similar tube with cork containing disinfectant is used to place the swabs in after use). The smaller tubes contain about 5 c.c. of sterile nutrient broth. A swab is taken from the test-tube and passed into the rectum of the patient for a distance of four inches. On withdrawal it is immediately inserted into the broth tube and agitated, thus washing material from the rectum into the broth. The swab is then transferred to the disinfectant tube for subsequent cleaning. The broth tubes are incubated for approximately half an hour and then plated on to MacConkey's medium. For this procedure the use of a platinum loop is favoured rather than a bent glass rod. A single plate and three drops of broth are used, two being deposited as single drops, while a third is drawn across the plate to form a base line from which other lines are drawn at intervals of about $\frac{3}{8}$ in. The loop is then sterilized and cross lines are drawn. By this method of plating single colonies are easily obtainable.

Plates are examined by a 100 watt lamp (the ordinary microscope lamp will serve), the red colonies of the *B. coli* being easily distinguished from the brownish-yellow colonies of Flexner. A single colony of the suspected type is picked off and used for slide agglutination, which will thus establish a diagnosis in 18-24 hours after collection of the swab. For further confirmation, sugar reactions and agglutination in dilution are proceeded with.

Routine.

Single cases are regarded as sporadic. A second case in a ward is an indication for all patients to be examined. This is quite quickly done. All cases are thus classified within 24 hours.

Typical examples recorded in the following tables show that 56·0 per cent. of dysentery patients did not exhibit clinical signs, though they were bacteriologically positive.

Number of patients examined.	Number bacteriologically positive.	Number exhibiting clinical signs.
52	2	1
88	7	3
58	12	5
47	9	4

More than 30,000 swabs have been examined by this method during the past sixteen years, and the need for more selective media than MacConkey's is considered unnecessary.

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