Technique.—The routine adopted for patients with previously normal or only slightly irregular menstrual histories consisted of one intramuscular injection of 1 mg. of prostigmin on three successive days, this treatment being discontinued if after the first or second injection the menstrual flow was restored. With the exception of two cases which failed to respond, the longest interval between the last injection and the onset of menstruation was about 72 hours. These periods were normal in quantity and duration, and in two cases biopsy proved the flow to be of a truly menstrual character.

Table of Results

Group	No. of Cases	Bleeding Occurred
1	30	Nil
2	24	82.8%
3	36	94.5%
Control	10	Nil

Group 1: Pregnant patients.

Group 2: Poorly selected cases; $\frac{1}{2}$ -mg. doses of prostigmin injected, only occasionally 1 mg.

Group 3: Properly selected cases; 1-mg. doses given from the beginning. Controls: Out of Groups 2 and 3; sterile water injected.

Illustrative Case.—A 2-para. Has always had regular periods, and presented herself in March and April with a delay of three days each time. She was treated with prostigmin. After one injection of 1 mg. on each occasion a normal period started. In August she had a delay of 8 days. Two full courses of prostigmin at an interval of 8 days had no effect. An A.-Z. test was returned positive, and later the pregnancy was confirmed clinically.

Complications

A number of patients complained of frequency of micturition and giddiness. One woman with a menstrual delay of 8 days complained, 20 minutes after the second injection of 1 mg., of "a film before my eyes, strong palpitations, sickness, and a terrific rush of water which came out of my mouth." She rapidly recovered from the attack without treatment. The action of prostigmin on the salivary secretion may conceivably have been the cause of some of these symptoms (Wright, 1940). This was the only really unpleasant incident in the series.

Conclusions

It appears that the age of the patient and the length of the menstrual delay are not decisive points in selecting the cases; some observers have reported successful treatment in patients with a delay up to 52 days. The character of the previous menstrual cycle, which should have been quite regular or have shown only slight variations, is of greater importance. Prostigmin is reliable in its action, as is shown by its success in 94.5% of this series. One wonders whether the two failures may not have responded to a fourth injection or to slightly larger doses. The drug causes some minor discomfort of a transient and not serious character, but it is quite safe and pregnancy is not disturbed.

The type of patient we had to deal with raises the question whether a wait-and-see policy or any other "psychological treatment" may not have been followed by similar success in a considerable percentage of cases. The injection of sterile water in 10 cases, previous to the proper prostigmin course, gave entirely negative results. Even if it were true that in cases of "functional amenorrhoea" the period will appear sooner or later with rest, tonics, etc., it should be borne in mind that prolonged amenorrhoea may lead to atrophic changes in the uterine muscle. The results are encouraging, and prostigmin deserves further clinical trial. We would suggest that the drug should be tried in all cases of delayed period except those of endocrine origin and those in which pregnancy has been established. Further clinical work may also reveal interesting effects of prostigmin in cases of dysmenorrhoea.

Summary

Ninety cases of amenorrhoea were treated with prostigmin. From 1 to 3 injections of 1 mg. were given.

The results obtained were favourable: in 94.5% of the cases of delayed period not due to pregnancy the menstrual flow was restored.

Prostigmin is safe; from its use no serious ill effects were observed. There is no tendency of the drug to interfere with the course of pregnancy.

This treatment should be reserved for cases with a previously regular or only slightly irregular menstrual cycle.

I wish to thank Miss G. Dearnley, honorary gynaecologist of the hospital, for allowing me access to her cases.

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Medical Memoranda

A Case of Dysentery associated with *Bact. alcalescens*

The following case may be considered of interest seeing that only in the last few years has *Bact. alcalescens* been recognized as an organism capable of producing acute dysentery. Nabarro and Edward's (1939) paper on this subject has induced us to regard the case as worthy of record.

CASE RECORD

Mrs. M., a nursing sister aged 25, was admitted to hospital on Sept. 9, 1941, with a history of intermittent diarrhoea for six weeks. After admission her stools presented typical dysenteriform appearances, and she was given appropriate medicinal and dietetic treatment. At no time was she acutely ill, nor did she have much pain. Under treatment she improved, but blood and mucus in small amounts persisted in the stools for some weeks. On Sept. 9 her stool, submitted before admission, consisted of gross blood-clot without visible faecal matter; it was cultured on two Wilson and Blair plates and tetrathionate broth (paratyphoid infection was suspected), also on two MacConkey plates. The Wilson and Blair plates proved to be entirely negative. Both MacConkey plates were covered by a profuse growth of non-lactose-fermenter with a few colonies of *B. coli*. The non-lactose-fermenting organism was identified from its cultural and fermentative reactions by the E.M.S. Laboratories as *Bact. alcalescens*, but was not agglutinated by either of the two sera available for this organism in the National Collection. Stools examined on Sept. 28 and Oct. 10 and 18 all contained small quantities of blood-stained mucus, and all, on culture on MacConkey plates, gave a heavily preponderant growth of *Bact. alcalescens* with only a few colonies of *B. coli* and *B. lactis aerogenes*. Serum examined on two occasions showed no agglutinins for the typhoid-paratyphoid group. Serum obtained on Oct. 18 showed no agglutinins for the patient's own strain of *Bact. alcalescens*. This was confirmed by the E.M.S. laboratories, which also tested for agglutinins for all the available strains of dysentery bacilli, with a negative result.

From Nov. 4 a live broth culture of *B. acidophilus* was administered daily for a fortnight. A stool examined on Nov. 8 contained no blood or mucus, and gave a negative result to tests for occult blood, and on culture showed only *B. coli* and *B. lactis aerogenes*. A stool examined on Nov. 21 contained no blood or mucus, but on culture a small number of *Bact. alcalescens* were found, with numerous *B. coli*. As the patient was now free from all symptoms she was discharged from hospital.

It has been suggested that the absence of agglutinins is against the causation of dysentery by *Bact. alcalescens* in this case. We find this hard to believe in view of its presence in overwhelming numbers and the complete failure to discover any other cause in spite of repeated examinations.

The apparent clearing up of the remaining symptoms after the administration of *B. acidophilus* culture is suggestive, and might, we think, be of use in other similar cases.

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 FRANZ A. HEIMANN, M.D., L.R.C.P.

REFERENCE

- Nabarro, D., and Edward, D. G. FF. (1939). *J. Path. Bact.*, **49**, 515.

A Case of Cystic Hygroma

The following case may be considered unusual enough to warrant publication.

Early in Sept., 1942, a child aged 20 months was brought to me by her mother, who had noticed a swelling in the left side of the neck, gradually becoming more apparent since birth. I found a rounded swelling above the outer half of the left clavicle, and diagnosed a lipoma. I advised leaving it alone unless it showed signs of growing or caused pain. About a year later she was brought back to me with the complaint that the swelling was growing. This was apparent on examination. The child was admitted to Harrow and Wealdstone Hospital, and on Sept. 25, 1943, under general anaesthesia, a large cystic tumour was dissected out apparently complete.