It may be that few of your readers have had any cause for alarm on this account. I feel, however, that eternal vigilance is necessary to prevent the sudden catastrophe, and occasional investigation into methods of cord ligature may be a useful prophylaxis.—I am, etc.,

Birmingham, 15.

A. L. DEACON.

## **Cutaneous Anthrax**

SIR,—At the suggestion of my good friends, Dr. G. C. Dockeray and Dr. H. Foy, I am putting on record the fact that during the past seven years at Magadi Hospital over 500 cases of cutaneous anthrax, mainly in Masai (a nomadic cattle-rearing tribe), have been treated with penicillin under my supervision.

Year		Masai	Other Africans
1950		64	8
1951		32	7
1952		35	5
1953		43	6
1954	11.1	58	9
1955		58 96	7
1956 (to date)		130	2
Total		458	44

There have been three deaths only, all in small children, one of whom died within a few minutes of arrival at the hospital. The mortality rate in treated cases is therefore less than 0.5%, so that the prognosis is very good indeed.

Most of the lesions were typical " malignant pustules." A few patients who attended early had itching sores, rather Localized "oedematous like scratched insect bites. impetigo" should lead one to suspect anthrax in an area where the disease is common. Diagnoses were confirmed by laboratory examination of exudates from the lesions in all but 28 cases. The anthrax-infected "itching sore" is a pitfall for the unwary, especially in afebrile children who may be sent away with merely a local application, as happened in one instance in my series. The child was admitted the following day with typical massive oedema around the sore, convulsions, and a temperature of 104° F. (40° C.). Fits are not uncommon in children suffering from this disease, possibly because of meningo-encephalitis associated with septicaemia.

Adults respond well to intramuscular procaine penicillin in oil in doses of 300,000 units daily until 24 hours after they become afebrile (usually in three or four days). Children require heavier dosage. I have given up to 2,400,000 units of "distaquaine" initially, but such a large dose is probably unnecessary. I still give 900,000 units of distaquaine immediately to a child if the temperature on admission is 104° F. (40° C.) or over. Butobarbitone sodium controls convulsions very well. I do not give any local treatment other than calamine lotion.-I am, etc.,

Magadi, Kenya.

T. H. WHITE.

## Colonic Motility

SIR,—I was interested in your annotation on colon motility and the significance of the observations of research workers in this field over the years (Journal, October 13, p. 870). My experience is that interpretation is very difficult, and I advise against drawing hard and fast conclusions from the work of Davidson and his colleagues at Cornell<sup>1</sup> on Type IV waves. To me a potentially significant point was the absence of these waves in seven children with ulcerative colitis (of more than one year's duration), not the matter of whether they had diarrhoea or not. Between 1946 and 1949 I investigated colon motility in 21 cases of ulcerative colitis, five cases of colon neurosis, and one case of duodenal ulcer, one carcinoma of stomach, one hysteria, one megacolon, and one colostomy for cancer of rectum. In the last year I have made more studies in colitis, Crohn's disease, and in one hypertensive subject, and this work is continuing. The length of each record is from two to three hours, and in some it has been repeated.

It is true that some cases of ulcerative colitis show a flat record with an inactive colon, but this is not invariable. My records tend to show that it is more common in the chronic form of the disease than in the acute severer types. This could be explained by physiological rest. After inserting the balloon through a sigmoidoscope it is usual to see a quiet period for 20 to 30 minutes which I have thought may be due to inhibition. It must not be confused with a genuinely inactive bowel. Most ulcerative colitis subjects, however inert their bowel, can produce some activity if tender emotional subjects involving their own life situation are discussed. If they still do not respond, morphine 1/12 gr. (5.4 mg.) intravenously has a remarkable effect on increasing tone and restoring motility of the normal type, if a little more excitable. Stimuli which had previously failed, such as gastrocolic reflex, increased stretch, and especially emotion, now succeed. It is possible that future investigators may find this a useful manœuvre.

I cannot draw any definite conclusions from my work, and I think the whole matter of what happens in the colon when an ulcerative colitis patient takes umbrage is still wide open, though I am inclined to think that vascular changes. haemorrhage, and oedema in the mucosa may be the major factor, but this would not exclude muscular activity (Lium's<sup>3</sup> original work) as of contributory importance.—I am, etc.,

JOHN W. PAULLEY.

REFERENCES Davidson, M., Sleisenger, M. H., Almy, T. P., and Levine, S. Z., *Pediatrics*, 1956, 17, 807.
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Lium, R., Arch. intern. Med., 1939, 63, 210.

## Physiological Castration Syndrome in Breast Cancer

SIR,—The interesting paper by Professor G. J. Hadfield and Mr. J. A. G. Holt (Journal, October 27, p. 972), dealing with the effect of castration upon breast cancer, has prompted me to send a short note of a case of this kind that I have dealt with recently.

My patient was aged 34, with three children, and was seen 19 months ago with an enlarged, hard breast completely infiltrated with carcinoma. I removed the breast and numerous infected glands that were present along the axillary and subscapular vessels. The operation was followed by a thorough course of radiotherapy, administered at University College Hospital. The patient remained well for six months; then the skin around the mastectomy incision became uncomfortable and was found to be widely infiltrated with recurrent cancer. No further radiotherapy was possible at this time, but on the advice of Dr. Gwendoline Hilton I castrated the patient. The ovaries were enlarged to the size of big walnuts, and histological examination showed that both were extensively infiltrated with highly malignant spheroidal cancer cells. A crystal of testosterone was implanted at the same time. After the operation the condition of the skin over the chest soon improved, and it became clear that the growth was of hormone-dependent type. A further course of radiotherapy was given to the operation area just one year after the breast was removed. At present the patient appears very well. It seems that the activity of the growth is controlled and secondary deposits are in a stage of regression which has lasted over 13 months. In view of the age of the patient, the type of tumour, and the early and extensive recurrence, this seems to me most remarkable.—I am, etc.,

Chobham, Surrey,

L. G. HIGGINS.

## History of Adrenal Virilism

SIR,-Professor F. T. G. Prunty (Journal, September 15, p. 615) mentioned Sampson (1697) as the first writer to describe the adreno-genital syndrome. According to H. Keil,1 two cases were described more than 2.000 years earlier than this in a part of the Hippocratic writings which have never been translated into English. Keil's rendering is from the French of Littré:

"At Abdera [a married woman] had had children previously; but her husband having fled, her menses became suppressed for