Clinical and other Notes.

"TRAITEMENT À VIDE" OF ENTERIC FEVER.

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In view of the exalted claims made by Lieutenant-Colonel G. Cree for the so-called "empty bowel" treatment of enteric fever, and the fact that so many of our officers have no opportunity of consulting many medical books or papers, it seems well that the claims should be carefully examined. They are that "it is based on the highest scientific principles," that it "surely must be looked upon as the only rational method of treatment of enteric fever at the present time," and "that they have in the empty bowel method a plan of campaign that excels anything that has gone before."

Lieutenant-Colonel Cree regards three pints of whey as ample for a patient in the early stages of the disease, and in addition gives "plain chocolate to suck," though presumably only in small quantities, and not till the patient is recovering. Now whey has the following compositions: Water, 93.64 per cent.; proteid, 0.82 per cent.; fat, 0.24 per cent.; sugar, 4.65 per cent.; mineral matter, 0.65 per cent.

It follows, therefore, that 3 pints would contain approximately 14 grammes of proteid, 4 grammes of fat, and 80 of carbohydrate, with a total energy value of 422 calories. Supposing 100 grammes of chocolate (approximately a quarter of a pound) to be given in addition, the proteid would be raised by about 8 grammes and the total calories brought up to about 900. It is not apparently known to what extent the increased tissue waste of fever makes up for the saving due to complete rest in bed, but it may probably be safely assumed that not less than 50 grammes proteid and 2,000 calories are needed daily, and very likely a good deal more. It is evident, therefore, that the treatment is essentially starvation. Now starvation was the sole treatment of fevers from the time of Hippocrates to the middle of last century when Graves desired it to be inscribed on his tombstone that "he fed fevers." Dr. Ewart in his paper makes no claim to originality either as regards the "empty bowel" or the use of whey, but points out that logically water and only water had been used by Luton, of Rheims; and unless my memory deceives me Sir W. D. Wilson in his evidence before the South African Commission advocates it. It must, of course, be frankly admitted that if the advocates of this

2 British Medical Journal, December 9th, 1905.
method of treatment can show exceptionally good results mere a priori reasoning such as the above is valueless; but can they? Lieutenant-Colonel Cree evidently thinks his series of twenty-nine consecutive cases with no deaths so remarkable that he italicises "consecutive" and "no deaths." In this connection it may be well to quote the words of one who has probably treated many thousands of cases of enteric.1 "Again, there is hardly any disease for which specific drugs and lines of treatment are more loudly vaunted. Often, the evidence on which the favourable opinion is based is of the most slender kind; two or three, or at most a dozen cases. On the other hand, the number of cases sometimes runs to a hundred or two, with a case-mortality of from 0 to 4 or 5 per cent." To give some instances: One unknown author2 treated 172 cases with 1 death by sulphurous acid; O. F. Paget3 treated more than 100 cases without a single death by means of olive oil in large quantities; Sir James Barr4 treated 55 consecutive cases in a tank with only 1 death. Thistle5 treated 100 consecutive cases by daily purging with calomel and salts, and only lost 2. Without any disparagement of Dr. Ewart, it may be pointed out that he is, or rather was, physician to a general hospital only, and so would probably have few cases of enteric to treat, and indeed he only mentions two in his paper. On examining the details Lieutenant-Colonel Cree gives of his 29 cases, it appears that the average duration of the fever was twenty-seven days, so that the treatment has apparently no effect in shortening it, and that hemorrhage occurred in 2 cases—surely by no means a low percentage—and that in most of the shorter cases Widal's reaction was negative, so that it may well have been the case that some of them were paratyphoids, in which the mortality is notoriously low. In the great bulk of the cases no information is given as to their after-history, but merely the note "Recovered," which may mean that on the date in question they were transferred to a convalescent camp, while the short interval elapsing between admission and "To duty" in some of the others presumably means that though they had returned to the ranks they were naturally not fit for anything very arduous in the way of duty.

Now let us consider the results of liberal feeding; Barrs6 gives meat as soon as the patient is hungry, and up to the publication of his paper had treated thirty-one cases with three deaths, none of the fatal cases having had meat. He gives details of two cases, one showing the effect of "ordinary mixed diet with minced meat" on a patient with a tem-

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1 E. W. Goodall, Medical Annual for 1905, p. 598.
3 Lancet, November 27th, 1897.
4 "Treatment of Typhoid Fever."
5 British Medical Journal, October 20th, 1906.
6 British Medical Journal, January 16th, 1897.
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perature of 102° F. Shattuck 1 gives minced meat, puddings, toast, blan­
mange, and soups made with tomato, potato, &c., but gives no results. Marsden 2 treated 200 "unselected" cases with bread and milk, custard, chicken, &c., in half of them giving fish prior to defervescence. He does not give his case-mortality, but had no case of perforation and only six of hæmorrhage, none of which were fatal, i.e., the same result as regards perforation, as Lieutenant-Colonel Cree obtained and only half as many cases of hæmorrhage, with seven times as many cases. Vaquez 3 uses milk, soups, meat, jelly, &c., and has had good results, but gives no figures. Snell 4 treated 100 cases with only one death, using 4 to 6 pints of milk daily and early solid feeding. Bushuyez 5 has treated 318 cases with a mortality of 8·2 per cent., losing not a single case from hæmorrhage, on the following dietary:—

" 7 a.m.—Tea and roll.
" 8 a.m.—14 ounces of gruel (oatmeal, barley, or wheat), with butter.
" 9 a.m.—One or two boiled eggs.
" 10 to 11 a.m.—A glass of milk, a roll, half a cutlet, and a bit of boiled meat.
" 12 to 12.30 p.m.—A bowl of soup and a little jelly.
" 3 p.m.—Tea and a roll.
" 6 p.m.—A cup of soup, a bit of chicken, and milk pudding.
" 8 p.m.—A roll and milk.
" During the night coffee or tea, with milk, is allowed several times."

Seibert 6 treated sixty-one cases with only one death on rice, pea, lentil, &c., soup.

My own experience of late years has been very limited, but when I did treat cases of enteric in large numbers I was altogether con­
vincéd of the advantages of a liberal diet, so convinced as to be a source of alarm to my chief, who had been accustomed to more classical methods. By this I do not mean that an early case was forcibly fed; on the contrary, if he wanted to he was allowed to starve, but as soon as he wanted food he was given large quantities of milk, bread and milk, jelly, custard, soup, eggs, and so on; and so there was never the risk of a starving man procuring unsuitable food illicitly. Surely the fact is that every case should be treated on its own merits and not on routine lines, and then "that intense craving for food, which is invariably present" may be gratified with impunity. At any rate, it is obvious how little relation there is between the full bowel and

1 Journal of the American Medical Association, July 10th 1897.
2 Lancet, January 18th, 1900.
3 Presse Médicale, February 10th, 1900.
4 British Medical Journal, February 25th 1905
5 Hutchison, op. cit., p. 483.
6 Medical Record, 1908.
"the resulting constant fear of haemorrhage and perforation, which we all must have met with when treating enteric fever on other lines" (i.e., than the empty bowel).

A CASE OF THROMBOSIS OF THE LATERAL SINUSES.

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An Egyptian soldier, aged about 25, was admitted to the general infirmary, Cairo, on June 2nd, 1909. He stated he had been feeling unwell for about six days, suffering from headache, constipation and vomiting.

Condition on Admission.—The patient looked ill and appeared mentally dull; the tongue was furred. The heart and lungs were healthy, the pulse slow, 48, but regular and soft; temperature 98° F.; abdomen sunken and very "doughy" to palpation. The liver and spleen were apparently normal in size. There were no signs of otorrhoea, but on examining the scalp some swelling and cædema was noted on the occiput and posterior parietal regions; the swelling was not tender or hot, and the patient gave no history of a blow, fall, or injury.

There was no paralysis or paresis and no twitching. The pupils were equal and reacted to light and accommodation. Knee-jerks were present, but elicited with difficulty; there was no rigidity. The urine contained no sugar or albumin. A tentative diagnosis of cerebral tumour or abscess was made.

Previous History.—There was no history of any serious illness and he showed no signs of syphilis.

Consequent Course.—On the day following admission his bowels were well opened by calomel and magnesium sulphate. He still continued to vomit his food; the temperature remained subnormal, and pulse 48 to 56 per minute.

The fundus was examined and nothing definite noted, though there was a suspicion of slight blurring of the optic discs. Two deep incisions were made into the scalp behind, but no pus escaped, only a little blood.

The following morning the patient was almost comatose and could only be roused by shouting his name in his ear. There was conjugate deviation of the eyes to the right. Both arms were slightly rigid and kept close to the sides. There was no apparent paralysis; the knee-jerks could not be obtained.

Though there were no localising signs it was considered advisable to operate. The site chosen was the most "boggy" part of the scalp, which was situated over the posterior and upper part of the left parietal bone.

Considerable oedema of the loose cellular tissue beneath the aponeurosis was found, but no evidence of pus.