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from chronic gastric ulcer, otherwise there was no family history bearing on the case. He gave no history of stomach trouble, and none to suggest gastric or duodenal ulcer.

Examination of the stomach contents gave no information. A blood count gave 2,450,000 red corpuscles and 8,000 white per c.mm., while a differential count showed a slight increase in polymorphonuclear leucocytes.

After admission he was unable to retain anything given by the mouth, except peptonized milk and albumin-water. The vomiting usually came on about half an hour after a meal, and was not of a violent nature nor suggestive of pyloric obstruction. There was no hematemesis or melena, and he never complained of pain.

Under daily lavage he seemed to improve, taking nutriment in the form of peptonized milk, albumen water by the mouth, and nutrient enemata.

An exploratory laparotomy was suggested, but the surgical specialist did not consider an operation justifiable, taking into consideration the patient’s condition. On October 26, the patient seemed to become much weaker, and on the following day the vomiting recommenced. He became gradually weaker and died on November 1, having taken nothing by the mouth during the previous twenty-four hours.

**Result of Post-mortem Examination.** —The body was very thin and emaciated. Heart and lungs were normal. The abdominal viscera, with the exception of the stomach and duodenum, were normal, and there were no enlarged glands, adhesions or ascites. The stomach was much enlarged and contained a quantity of partially digested milk, the walls being much thickened. At the pyloric end of the viscus, and reaching for about one inch into the duodenum, the walls were thickened to the extent of about a quarter of an inch. The lumen of the pylorus was much diminished, being about the size of a goose quill on its gastric side and nearly totally closed on its duodenal aspect. There was no sign of ulcer either of the stomach or duodenum.

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**MULTIPLE NEURITIS AMONG SOLDIERS IN CALCUTTA AND VICINITY—AN ENDEMIC, EPIDEMIC, SEASONAL DISEASE RESEMBLING BERI-BERI.**

By Colonel F. Smith and Captain A. E. F. Hastings. Royal Army Medical Corps.

In these days when polyneuritis is almost universally regarded as due either to a diet of polished rice or to over-indulgence in alcohol, it seems desirable to place on record cases which are certainly not ascribable to either of the causes above mentioned.

The term beri-beri is, after all, only an Eastern name for multiple
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neuritis, and was in use long before the polished-rice theory came into vogue. There seems no reason why the term should not continue to be used, just as we use the word malaria to denote the disease which is now known to be not due to bad air but to a parasite. Cases such as we are about to describe would, if they occurred among natives in Malaya, undoubtedly be called beri-beri.

For four consecutive years, at about the same season of each year, there has been recorded a moderate prevalence of polyneuritis in Calcutta among the European troops. This year (1912) is no exception. The disease appeared as usual towards the end of the rains; it has appeared also in the garrisons at Barrackpore, which is 12 miles away, and Lebong in the Darjeeling hills many miles from Calcutta.

The number of cases returned among the troops in Calcutta for the last four years has been as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
</tr>
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<tbody>
<tr>
<td>1909</td>
<td>7</td>
</tr>
<tr>
<td>1910</td>
<td>3</td>
</tr>
<tr>
<td>1911</td>
<td>10</td>
</tr>
<tr>
<td>1912</td>
<td>6</td>
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</tbody>
</table>

In the records of previous years I find only one case. It occurred in 1906 and was returned as beri-beri.

The prevalence at Lebong in 1911 was greater than at Calcutta—there were over fifty cases.

Last year the Lebong cases were sent to Barrackpore to convalesce. This year the disease has appeared among the European troops stationed in Barrackpore. Are these two facts in relation of cause and effect?

The disease at Calcutta has occurred mostly in the third quarter of the year—a hot, rainy period. Various foods and drinks, including water, have been suspected in turn as the cause. Analyses have been made in the fruitless search for toxic substances. Last year a note was made of the fact that one of the units most heavily attacked had previously served in Singapore, an endemic home of beri-beri. But the disease was known in Calcutta before the unit came from Singapore. The cases, too, were by no means all in men who had been in Singapore, and the disease attacked units which had not been in that station. Moreover, the unit from Singapore had not suffered from neuritis while there.

The disease at Lebong last year was first thought to be due to hill diarrhoea and to be mere debility, but this theory was soon abandoned. This year at Calcutta some of the cases followed immediately on dengue, but others were unconnected with that malady. Some of the cases were so mild at Lebong that the men were treated out of hospital; a few, on the other hand, at Calcutta and Lebong, were fatal.

The unit from Lebong came down to Calcutta for the King's visit last year (1911) and was encamped on the Maidan. Previous to its setting out on the march from Lebong several men were weeded out for oedema of the legs. Two cases were discovered on the march. For some weeks
after arrival in Calcutta the unit was free from neuritis; afterwards further cases occurred. Then the disease died out. Now, a year later, fresh cases have occurred.

Regarding the habits of the men: some led sedentary lives, others were active; some were total abstainers, others were moderate drinkers, while a few drank to excess.

As regards dietary: all the men had their rations, supplemented by suppers from the regimental supper-bar. The suppers consisted of meat cutlets, liver, fish, pies, &c. The vegetables supplied were fresh. Rice was rarely eaten more than twice a week. It was not the polished variety. Flour was used in bread, in puddings and in pies. It was suspected in its turn and examined for moulds, foreign grain, fermentation, &c. Ankylostomiasis was excluded by examination for ova.

The cause of the disorder remains a mystery. Cases, we believe, are met with among civilians in Calcutta; what relation, if any, it bears to endemic dropsy we cannot say, but according to Lieutenant-Colonel W. B. Thompson, R.A.M.C., who wrote as Officer-in-Charge Station Hospital, Calcutta, concerning the cases in 1909: “During and after the rainy season in Calcutta an epidemic of so-called epidemic dropsy was prevalent among the native population, thought by some to be a species of beri-beri. . . .” The 1911 report of the Inspector-General of Civil Hospitals—Colonel G. F. A. Harris, I.M.S.—is much more emphatic as to the prevalence of beri-beri in Calcutta. Under the heading “Beri-beri” this officer mentions that there were eight deaths, and he compares this with the high mortality (433 deaths) in Calcutta in 1909. He quotes Dr. Pearse, Health Officer of Calcutta, that “There is no evidence that the diet of the people has changed since 1909, and the milling of rice goes on exactly as before.” Colonel Harris says the two diseases, epidemic dropsy and beri-beri, may be identical, but that it has not yet been satisfactorily proved that they are. The symptoms were those described in the text-books—the disease being mainly of the “dry” variety, though edema of the legs was sometimes marked. Patchy anæsthesia of the lower limbs was noted, particularly on the inner side of the calf, with hyperæsthesia sometimes just beyond the line of anæsthesia. The hair over the anæsthetic patches was in some cases loose and easily pulled out. In one case the paralysis developed almost suddenly and was very extensive and persistent—the man being unable to stand. The patient was in hospital for seven days preceding the attack, and had been three days free from fever.

Among previous outbreaks of multiple neuritis in white men the following are worth noting:—

(1) Lieutenant-Colonel C. G. D. Mosse, Journal of the Royal Army Medical Corps, September, 1904. Ninety-one cases among Boer prisoners in St. Helena. The British Guard on the same dietary had
no cases. The disease had been imported into the island some seven months before by Norwegian sailors.


(3) Fleet-Surgeon R. C. Munday, *Royal Navy Journal*, 1911, H.M.S. "Hyacinth," in the Persian Gulf, in 1909, had an outbreak of beri-beri among the Lascars. It was ascribed to polished rice. No Europeans were attacked. But in the following year when the Asiatics were affected only in slight degree, seventeen cases occurred among the European sailors, who, of course, were not on rice diet.


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Lecture.

REFLECTIONS ON THE NAPOLEONIC CAMPAIGN OF 1812.¹

BY LIEUTENANT-COLONEL S. GUISE MOORES.

Royal Army Medical Corps.

This, as you are no doubt aware, is the centenary of Napoleon's campaign in Russia.

Various reasons are given for Napoleon's decision to wage war. His standards had hitherto been carried to victory over all the battlefields of Europe, and now with the insatiable impulse of the conqueror he wished to humble Alexander, and "throw himself upon Asia with all the concentrated forces of Europe." He was a fatalist, as is shown by his own words: "I feel myself impelled towards a goal with which I am unacquainted; when I shall have reached it, when I shall be no longer needed for it, an atom will suffice to throw me down; but until that moment all human efforts will be powerless against me." In this spirit he gathered together the mixed forces comprising the "Grande Armée." It consisted of troops mostly inured to war's vicissitudes. Its very magnitude, captained as it was by the greatest soldier of all time, made it the most formidable machine for war ever constructed.

The Emperor studied the country he was about to invade very carefully—its roads, rivers, forests, &c. He also occupied his marvellous intellect on the question of construction and provision of transport

¹ Read before the Aldershot Command Military Medical Society.