rest on the tenth day. After three and a half weeks the baby was allowed to be taken home with a well-healed abdominal wall.

For the notes of these cases I am indebted to Mr. H. N. Fletcher, senior house surgeon.

Brighton.

Clinical Notes : MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A CASE OF QUININE POISONING.

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THE patient, an American citizen, came to me in December, 1907, complaining that he was unable to take quinine. He gave the following history. He was born in 1873 in New York, where he had chiefly resided. He lived for nine years, however, in Australia and had visited several places in North and South America. For the last two years he had resided in Manchester until December, 1907, when he arrived in Nigeria. He had had no serious illness that he could remember, but when 16 years old and while residing in New Jersey he took quinine for a cold. He became so ill that a medical man was called in, who said that he had been poisoned by quinine. Two years ago he suffered in a similar way after imbibing some beverage which he afterwards discovered contained quinine in small doses. Fortunately, it appeared that he never had to take quinine for a malarial attack. While travelling from England to Nigeria the patient was advised by his fellow passengers to begin taking his daily dose of quinine. He accordingly took five grains of euquinine, but two hours afterwards he became violently ill and henceforth discontinued taking the drug till he saw me on Boxing Day, at Lokoja. He was admitted into hospital at 9 A.M. At 9.30 A.M. two and a half grains of quinine-bisulphate solution were given and he at first sat in a deep chair on the verandah. In about an hour's time he said, "It is beginning," and he then complained of a "sinking" feeling in the abdomen and flushing of the face occurred. He was now put to bed in the ward. Intense irritation and discomfort then began in the feet and gradually spread throughout the body. This was quickly followed by a rapidly spreading rash, erythematous rather than urticarial in character and most marked on exposed portions of the body. His appearance had by now undergone a complete change: the face was flushed and the skin everywhere was hot, hyperæmic, and dry; the temperature, however, was subnormal. There were distracting tinnitus and frontal headache, but no amaurosis. The heart's action was seriously weakened and the pulse was feeble, accelerated, and irregular; there were palpitation and shortness of breath. The patient looked and felt ill, the flushed appearance, restlessness, and general pruritus producing a picture of severe anguish. At noon he had a syncopal attack while trying to rise from his bed. At about 2 P.M. the pruritus and erythema began to pass off, but nausea and severe headache remained. At 3 P.M. the temperature had risen to 101° F., and he was perspiring profusely. By dinner-time he felt better, all the symptoms had cleared up with the exception of headache. At 10 P.M. he was sleeping quietly with a normal temperature.

On the next day the patient was in his normal health, but a detailed physical examination showed that there was very severe anemia with hæmic heart murmurs. The organs were apparently healthy otherwise and no malarial parasites were found in the blood. Under the circumstances it was considered advisable to invalid him home, and he accordingly left for England at the end of January. He never reached home, however, for he died from "fever" on the return voyage.

Genuine cases of inability to take quinine are rare in my experience, and dislike, rather than real disability, is generally at the bottom of most troublesome cases of quinine antipathy. The case just quoted, however, should

teach us to be on our guard and no conclusions should be drawn until actual experiments have been made. It appears to me also that it would be a sound practice if all officials and others who contemplated residing in malarial districts were examined as to their capability of taking quinine before they ventured out into unhealthy lands.

Lokoja, Northern Nigeria.

SEVEN CASES OF POISONING BY CHEESE.

BY W. B. EVANS, M.B., C.M. ABERD.

ALTHOUGH cheese is one of the most common articles of food and is eaten in various stages of decomposition or "ripeness," apart from the indigestibility due to its physical condition it rarely gives rise to serious trouble. The following is a brief account of seven cases of poisoning under my care which were undoubtedly due to cheese and which, on account of rarity of the cause, are, I think, worthy of record.

I was recently called to see a boy, aged three years, who was ill. On my arrival I found the child to be collapsed, cold, in a profuse perspiration, with a subnormal temperature, and almost pulseless. He was said to have been taken suddenly ill about an hour previously with abdominal pain and violent vomiting. Whilst examining this child a brother, aged eight years, commenced vomiting and crying out about a pain in the epigastric region, and before I left another brother, aged 12 years, came in saying that he had just been attacked with violent vomiting and epigastric pain. On making inquiries about their food I was informed that their last meal had consisted of bread and cheese and tea.

On the same night at about midnight I was called to see three brothers, their ages ranging from 10 to 16 years, who were suffering from abdominal pain and vomiting which had suddenly come on. One of them complained of diarrhoea in addition. The supper of these lads had consisted of biscuits and cheese.

On the following afternoon I was called to see another boy, aged six years. Him I found in a collapsed condition, having vomited violently, sweating, cold, and nearly pulseless—in a precisely similar condition to the first child. He, too, had had cheese for his dinner.

The treatment consisted of emetics of mustard and water to commence with, except in the cases of the collapsed children where brandy and water was prescribed. A bismuth mixture was exhibited to all and to the boy with diarrhoea a dose of castor-oil was given. The patients all did well; within 24 hours they had practically recovered, and within 48 hours those old enough had returned to school and to work. Several adults, including these children's parents, who had also eaten this cheese told me that they had suffered from epigastric pain and nausea shortly afterwards but not sufficiently to call for treatment.

The interesting features of this epidemic are: first, the cause, cheese, which rarely gives rise to such severe symptoms; and, secondly, the ages of the patients. In each of the seven cases the age was under 17 years, and although the parents and other adults partook of the same food they were not affected to any appreciable extent. In fact, the severity of the symptoms appeared to be in the inverse ratio to their ages, the two youngest patients being those most seriously affected and having a really narrow escape.

I examined the cheese, which smelt rather strongly and had a somewhat crumbly appearance, but was not discoloured or offensive, and was said to be new. There was nothing about it to warn purveyor or purchaser that it was not wholesome.

Tyrotaxon, the ptomaine in new cheese, produces a series of symptoms very similar to those described above, and I have no doubt that this alkaloid was the cause of the epidemic.

UNIVERSITY OF CAMBRIDGE, DEPARTMENT OF
MEDICINE.—The R. C. Brown Pathological Scholarship in
connexion with the Study of Special Diseases has been
awarded to Miss E. H. Morris, M.B., B.S. Lond.