are alone selected. The remarks of Jonnesco, quoted in the note alluded to, are well worthy of careful consideration.

(*iv*) *Note on Toxic Sweat and Prickly-heat* (*p.* 469).

With reference to the allusion under the above heading, to the danger of the disappearance of the rash in the exanthemata, a view in accordance with the opinions of nearly all observers, the following case seems to me worth recording as illustrating this point. A boy of about nine years of age, unvaccinated, was attacked with fever, pain in the back, &c. Immediately after the appearance of the rash, he was admitted to the small-pox ward in the General Hospital. For three days he did well, the rash becoming very well-marked. He was seen at 10 P.M. that night and was very well. By the time I saw him at my morning visit (7-15 A.M.), he had become delirious and very restless, had vomited, and had a very bad pulse. I noticed that the rash instead of being better marked than on the day previous had almost disappeared, particularly from the face, where it now had the appearance of late measles rather than of typical small-pox. He grew rapidly worse, and died about 9-30 A.M. that morning. Unfortunately, the urine was not examined after he grew suddenly worse: previously, it contained the trace of albumen usual in such cases. The change in appearance of the rash was most marked.

(*v*) *Annual Report on Medical Institutions, Madras City* (*p.* 476).

There are two points referred to in the review of this report which seem to require notice:—

(*a*) "Malarial fever appears to have been much in evidence, 17,845 persons having been under treatment for the disease. Considering that Madras is not deemed a particularly malarious spot, this seems a large number." This large number, however, will not surprise those who are familiar with two facts, *viz.*, *firstly*, that a very large number of patients, suffering from malaria in one form or another, come to the General and other hospitals here from extremely malarious districts, particularly Cuddapah and Kurnool; and *secondly*, that Madras itself, and more especially that densely populated area called Blacktown, is yearly becoming more malarious. This is well-known to many medical men and has been pointed out before now, *e.g.*, by the present Sanitary Commissioner, Surgn.-Lt.-Col. W. G. King. I constantly get admissions to my wards of very bad malarial cases, acute and chronic, which have originated in persons resident all their life in Madras, or who have remained free from the disease until coming to live in Blacktown; and such cases are yearly becoming more frequent both in hospital and private practice. Those interested in the subject will find it well worth while to study the minute lately reissued by the Sanitary Commissioner in which the reasons for such a state of things are made clear.

(*b*) "During the hot weather a peculiar fever of a continued type, but which cannot at present be classified, is very prevalent. In some localities of the city almost every house contributes to the victims of this disease." Whilst I do not deny positively the existence of fevers the etiology of which is at present unknown in India, I am exceedingly sceptical as to the value of the above statement. If such a fever or fevers existed, one would surmise that cases of it would certainly be admitted to the General Hospital from time to time. Yet in seven years I do not remember seeing such a case. When patients are kept under constant trained observation, as is possible in a hospital alone, doubtful cases always resolve themselves into one or other recognised form. To discuss the various possibilities is beyond the scope of these remarks, but experience has shown me that these mysterious cases are *chiefly* malarial, with a certain percentage of enteric fever, pneumonia, round worms, &c. A bad remittent is very apt to be considered a continued fever unless an accurate chart is kept, more especially as there are often so few symptoms other than those common to all fevers.

(*vi*) *Beri-Beri in Madras.*

This disease undoubtedly occurs in this Presidency. I saw one case of the acute form (fatal) in a Telegu recruit, shortly after I came to India. My first diagnosis, founded on a complaint of giddiness only, was malingering; my second, on the return of the recruit to hospital a few days later, was locomotor ataxy (*cf.* recent correspondence in the *British Medical Journal*); soon afterwards the diagnosis became clear. He became very bad with effusion into the serous cavities of the body, including the pericardium. One night he suddenly raised himself in bed, gave a cry, and fell back dead. Typical cases of the chronic form are admitted occasionally. I have a European under treatment at the present time, non-anæmic, with marked neuritis, and who suffered, for about a fortnight after admission, from very painful and frequent attacks of spasm and a sense of suffocation, relieved only by morphia.

A CASE OF IDIOSYNCRASY OF INTOLERANCE OF QUININE.

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I venture to report the following case in response to the request made in the editorial in the October number of the *Gazette* that medical men in India should give the results of their experience of cases of intolerance of quinine and of quinine exanthemata. The case, I think, is of

interest in view of the fact that temporary tolerance of the drug was established during a severe attack of malarial fever. The patient was a married lady, aged 24, of European descent. Previous to the onset of menstruation no disagreeable effect was produced on occasions when quinine was administered for minor ailments necessitating the use of the drug. The first occasion on which it produced toxic symptoms was at the age of 15, when she took a moderate dose for a "feverish cold." The administration was rapidly followed by a feeling of nausea, giddiness, deafness, dimness of sight, flushing of the face, dyspnœa, a sinking sensation at the epigastrium, and a feeling of profound prostration. An eruption, partly urticarial in character and partly taking the form of erythematous patches, was observed all over the body, while there was marked œdema of the hands and feet. Vomiting soon followed with relief of the symptoms, the rash fading in about six hours, leaving, however, a scaly, roughened condition of the skin, like "prickly-heat when dry" as the patient puts it.

These symptoms were invariably produced even by a minute dose of quinine, and once, as recently as three years ago, in a pronounced manner, when quinine was given to her without her knowledge in the form of a pill. At the same time when tried by way of experiment, the mere contact of quinine on her lips produced œdema of the lips, and a red and blotchy appearance of the face.

From 1894—1897 she lived in two very malarious districts in Ceylon, but kept her health well, never having a day's fever. In January while making a stay at a sea-side resort 1897, on the North of Ceylon, she came in for an attack of ague. She was at the time in the fifth month pregnancy. The fever at first was tertian in of type, then double tertian, one paroxysm coming on one morning, the other the following evening, and then it took on a remittent type. The medical officer of the station, being warned of her idiosyncrasy, prescribed arsenic and cinchona, — phenacetin, diaphoretics, &c., being given for the relief of high temperatures. The temperature varied between 102—104°; there was distressing vomiting, great dyspnœa, and feeble cardiac action. The course of the disease was in no way influenced by the treatment. When I was consulted, her condition was as described, fœtal movements were imperceptible, and the patient very low.

It was decided to try quinine in small doses, and accordingly quinine in gr. $\frac{1}{4}$ doses was given every 4th hour with the mixture of bark and arsenic without the patient's knowledge. Its almost immediate rejection led the patient to express her surprise that she was not able to retain the usual mixture. She was undeceived, the drug was persisted in, and tolerance was rapidly established. Increasing doses of the drug were given, till in a few days she was taking 3 gr. every 4th hour. The symptoms improved; and in the course of a week, since starting quinine the temperature fell to normal. During convalescence she continued to take 3 to 4 grs. of quinine twice daily. In April 1897, a month after her return to the malarious district in which her husband was stationed, she had another attack of intermittent fever, which lasted only three days.

In anticipation of the risk of puerperal malarial fever, she continued taking quinine in 4 to 5 gr. doses twice daily before and after her confinement, which was normal and at full term.

About three weeks after confinement, quinine was not taken for two days, and on resuming it and taking a dose of about 2 grs., toxic symptoms were produced, in the shape of erythematous patches over the body in general, a measly congestion of the face, lividity of the lips and ears, œdema of the fingers, and an intense itching of the body. These symptoms produced no great distress, and my attention was laughingly drawn to them by her while she was nursing her infant.

These symptoms were very evanescent, disappearing in a few minutes. The drug was continued daily in small doses. Though still living in a very malarious district, she has had no fever till a week ago.

She writes: "For the past week or so I have had fever off and on, which I attribute to my not having taken quinine regularly. I sometimes miss a day or two, and when I do take it, I do not feel quite myself, and I immediately experience a sensation of numbness and tingling in hands and feet, fulness in my head, and get a running from nose which lasts about two hours, and gives relief. This last symptom is quite a new feature, and appeared only a week ago. I take quinine regularly, twice daily, in 2 gr. doses. Even this morning it produced its old, familiar, disagreeable effects. I cannot take more than 3 gr. at the most; if I do, I feel very bad."

Remarks.—In this case there is no doubt that the malarial poison was present in the system to such an extent that the drug expended its force in producing its antidotal effect without injury to the patient, and without producing those toxic symptoms observed on previous occasions when the presence of malaria could not have been so marked. I have since learned that this patient also evinces an idiosyncrasy towards opium, as the narcotic effects produced by 5 gr. of Dover's powder, when given for an attack of dysentery in 1895, was so marked, that it was noticed that 2 gr. of Dover's powder was amply sufficient to produce the effect expected of the drug. In conclusion, I may add that the patient is a strong and healthy person, and by no means of neurotic temperament.