

A CASE OF WEST AFRICAN FEVER.

By W. T. PROUT, M.B. EDIN., COLONIAL SURGEON,
GAMBIA.

THE following case of fever, which occurred on the Gold Coast, may be of some value as a clinical contribution to the study of West African fever, inasmuch as it differs considerably from the ordinary cases of malarial fever which are met with and is of interest so far as its irregularity and duration are concerned.

The patient, a European, had been travelling along the coast by hammock, a fatiguing method of locomotion, and arrived at Cape Coast Castle on the afternoon of Sept. 26th, 1892. During the journey he had walked a good deal and had been exposed to the rays of the sun. On the morning of the 27th his head ached and he felt pains in the muscles of the neck and back, but thinking little of these symptoms, he went out shooting on a slow-flowing river, surrounded by mangrove swamps. On his return he felt much worse, and when I saw him about 7 P.M. his condition was as follows:—He was suffering from pains all over the body, neck and limbs, with severe headache; the tongue was very foul and constipation was present; the temperature was 101° F. An antipyrin mixture containing ten grains to the ounce was given twice with an hour's interval, and a pill composed of blue pill and colocynth and hyoscyamus was given at night.

Sept. 28th.—The temperature is 99° and the patient feels much better. He sweated profusely all night and has had one fairly copious stool. Twelve grains of quinine were taken at 7 o'clock and another twelve grains at 10 o'clock. At 6 in the evening the temperature had risen to 100·5° and the patient felt very uncomfortable. Ten grains of quinine were ordered.

29th.—The temperature is 99°; it rose to 100·5° in the evening. The patient had had no further motion of the bowels and complained of feeling constipated. Six grains of calomel, followed by a saline purge were ordered.

30th.—The temperature is 100°. He has had one stool. Twenty grains of quinine were taken during the course of the forenoon. At 4 o'clock I saw the patient again and found him suffering from intense neuralgic headache, with a temperature of 102·5° and a very foul tongue. I ordered ten grains of antipyrin every hour for four hours. Of these only two doses were taken, as according to the patient's statement the first dose had a magical effect and removed the headache in fifteen minutes. By 8 o'clock his temperature had fallen to 100°.

Oct. 1st.—The temperature is 102·5°. The patient is again suffering from headache. The temperature fell about 11 o'clock, but rose in the evening. Thirty grains of quinine were taken throughout the day. I first observed a slight feeling of tenderness on pressure in the epigastrium.

2nd.—The temperature is 101·9°. The patient is suffering from severe headache and general discomfort. Antipyrin was given to reduce the temperature and thirty grains of quinine were taken during the day.

3rd.—The temperature is 103·4°. The headache still persists; the tongue is very foul and of a muddy grey colour. The patient has no appetite and complains of a slight feeling of nausea at times. The pulse is fairly good. On examination the urine showed the characteristics of a febrile urine and contained no albumen. Antipyrin was again prescribed and at 4 o'clock the temperature had fallen to 100·5°, but rose later to 102·3°. Forty-five grains of quinine were taken during the day.

4th.—The general condition of the patient remained much the same throughout the day. Forty-five grains of quinine were taken.

5th.—On this day, the ninth of the attack, the patient was decidedly worse. The temperature reached a higher point—namely, 104·3°—than it had done previously, the headache and other symptoms remained much the same and the patient was undoubtedly weaker. As quinine by the mouth appeared to have had little effect in checking the rise of temperature I tried the effect of a hypodermic injection of the neutral sulphate of quinine (8 grains). Antipyrin with tepid sponging succeeded in reducing the temperature to 101·1° by 9 o'clock. Throughout the day liquid food was given regularly every hour or two in the form of milk-and-soda, and thin arrowroot, essence of beef, beef peptone &c., with champagne and soda at intervals. This treatment was con-

tinued throughout the subsequent course of the attack, with the exception that brandy was substituted for the champagne.

6th.—The patient now began to suffer from diarrhoea. He had six thin watery stools throughout the day of a brownish yellow colour. The temperature rose to 104·9° at 9 o'clock at night, but this was reduced by more than a degree by sponging. I examined the abdomen carefully, but could detect no tenderness in the iliac region.

7th.—The patient had a very bad night, with dreadful dreams. The temperature remained persistently over 103° till the evening, when it was reduced in the usual way to 102·5°. He had six offensive stools of the appearance of pea soup during the twenty-four hours. A mixture of bromide of potassium (gr. 30) and chloral hydrate (gr. 15) was given as a sedative at night.

8th.—He has had a very bad night. He has had six stools. The temperature was persistently 103·4° till the evening.

9th.—He has passed another bad night. At about 3 A.M. I was called to see him, and found him excited and restless. I injected a quarter of a grain of hydrochlorate of morphia, which quieted him. The temperature in the morning was 104·2°. On this and subsequent days I prescribed from 20 to 30 grains of antipyrin, to be taken at 10 o'clock, which always produced considerable sweating and lowered the temperature. At 11 o'clock the patient was sponged with tepid water, to which a little brandy and Florida water had been added, and from 19 to 20 grains of quinine were given by the mouth. Between 6 and 7 o'clock the antipyrin was repeated, and the sponging about 9 o'clock. Morphia was given hypodermically at night. He passed four stools of the appearance of pea soup during the day.

10th.—He passed rice-water stools during the day. In the morning I observed in the stools slight streaks of blood mixed with small lumps of semi-solid gelatinous matter. Towards the end of the day the blood had disappeared. He was extremely restless and uncomfortable all day, finding no relief in any position. The temperature fell by three o'clock to 99·8°, but began to rise afterwards, and by a quarter to seven had reached 105°, the highest point during the attack.

11th.—The patient's condition is much the same.

12th.—Towards morning the patient began to show signs of wandering. This persisted through the day, and took the form of incoherent and curious delusions. There was no violent excitement. His face has a pinched anxious expression, and is very pale; the tongue is very foul, and is covered with a thick yellow fur, with red irritable-looking edges.

13th.—He was incoherent and somewhat excited in the morning, when the temperature was very high (104·5°). Towards evening, however, the general condition had improved and he talked sensibly.

From Oct. 14th the improvement in the patient's condition may be considered to have commenced. There was no return of delirium and the temperature showed a slight diminution each day. Antipyrin and quinine were given regularly and liquid diet was persisted in. On the 16th the patient's tongue, which had hitherto been very foul, began to show signs of clearing from the edges. The stools were now reduced to one or two a day and were less offensive. On the night of the 17th he was able to sleep without an opiate, and on the following day I removed him to another room for a few hours and he was able to take a little solid food. On the morning of the 21st the temperature reached normal for the first time, though a slight afternoon rise persisted for some days after this. By the 28th he was able to go on board a steamship and he was invalided to Grand Canary, where he resided for several weeks.

Remarks.—The case differs from the ordinary attacks of malarial fever which are met with on the west coast of Africa chiefly in its duration and the high level of temperature maintained throughout the attack. At first there was absolutely nothing which could lead me to distinguish it from an ordinary attack of fever. There was the usual morning remission of temperature with an evening rise of a degree or two. It will be observed, however, that there is a certain resemblance during the first ten days to the course of the temperature in typhoid fever, the rise taking place by a series of irregular but gradual steps, which tend to be tertian in type as seen on Oct. 1st, 3rd and 6th. The failure of quinine to prevent the rise of temperature was the first thing which led me to suspect the existence of some complication, and that this was probably typhoidal in its nature was shown by the appearance of diarrhoea on the tenth day of the attack, and of streaks of blood in the stools on the fourteenth day. There was no abdominal tenderness throughout except the slight feeling of discomfort on pressure in the epigastrium

which is not uncommon in malarial fevers. The persistence and character of the headache, too, were unusual. Lastly, the very gradual fall of temperature, beginning about the 14th and amounting only to two-tenths or three-tenths of a degree daily is interesting. An examination of the blood in this case would have been of value, more especially if the malarial organism could have been identified; but unfortunately pressure of other work prevented my undertaking this investigation.

THE TREATMENT OF SEVERE CASES OF CONGENITAL TALIPES VARUS IN INFANCY.

BY W. ARBUTHNOT LANE, M.S. LOND., F.R.C.S. ENG.,
ASSISTANT SURGEON TO GUY'S HOSPITAL AND THE HOSPITAL FOR SICK CHILDREN.

So much has been written recently about the treatment of severe cases of congenital talipes, and the subject has been discussed so thoroughly by men of great ability and experience, that I feel a certain amount of hesitation in reopening the question. My only excuse for doing so is that as there are so many different methods in use, the opinion of any surgeon who has given each a fair trial may be of some slight value. As the result of my experience I would say that there are only two methods of treatment by means of which the deformity, if considerable, can be met at all satisfactorily. One is the so-called open method in which the skin and soft parts are divided till the foot can be made to occupy at once a position of moderate abduction, the tendo Achilles, and if necessary the other tendons, vessels and nerves behind the internal malleolus, with perhaps the posterior ligament, having been previously divided; the other method involves a division of everything beneath the skin in the sole and inner aspect of the foot which opposes the foot being placed at once in a position of slight abduction, the tendo Achilles, and, if necessary, the other structures already enumerated being divided subsequently. The first method, though it suggests an apparently serious operation, is really a very trifling one. I have hastened very considerably the healing of the wound which results and also obviated subsequent extensive cicatrisation by changing the dressings on the second day and by applying a large skin graft over the whole of the raw surface, taking care to make the graft large enough to allow for the shrinkage which always takes place in it. The result which is obtained by this operation is apparently most satisfactory—the wound heals very rapidly and securely and the foot remains flat, but when the patient begins to walk on it the result is in my experience very unsatisfactory, since there is an absolute loss of continuity of all the soft parts in the sole of the foot. I have never obtained by this method a result with which I was satisfied, nor have I yet seen one. It has, however, the advantage of obtaining at once a perfectly flat foot without there being any excuse to have recourse to an appliance which may require constant attention to bring the foot gradually into a satisfactory position. The other operation, or that of complete subcutaneous section, is the one that recommends itself most strongly to me. In doing it, unlike the preceding method, it is, for obvious mechanical reasons, necessary to divide the structures in the sole of the foot before cutting those behind the malleolus. An india-rubber bandage is applied above the knee to control the circulation, so as to prevent the free bleeding that would otherwise occur, and then, by means of a strong long-bladed sharp-pointed tenotomy knife, everything beneath the skin that opposes the placing of the foot in a position of moderate abduction upon the astragalus is divided. This includes the several divisions of the plantar fascia, part of the internal lateral and annular ligaments, the superior internal calcaneo-scapoid,¹ the inferior calcaneo-scapoid and the long and short plantar ligaments, together with the tibialis anticus and all the tendons, vessels and nerves in the sole of the foot. This cannot be done satisfactorily through a single puncture, but I do not hesitate to make any number of punctures, only taking care that the knife is entered in such a direction that the forcible fixation of the foot in a position of abduction does not cause the wound made by it to gape. This is a matter of

considerable importance, since it is frequently necessary to sew up the apertures which are made by the knife, otherwise arterial blood spurts through them on removing the tourniquet. By spending some time and by exercising a moderate amount of skill it is possible to divide all the soft parts opposing abduction of the foot on the astragalus and to leave the skin intact except for the punctures produced by the tenotomy knife. After this has been done I pass a knife between the skin and tendo Achillis and divide it. If the foot does not become square I cut all the soft parts except the peronei, carefully dividing the posterior ligament of the ankle-joint, which often opposes free movement of this articulation. The disadvantage of this operation, as compared with the open method, is that in bad cases the skin for a time affords an obstacle to the foot being retained in a good position and necessitates an application of a plaster-of-Paris bandage at intervals of about every three or four weeks, but no complicated appliance is required, the foot and leg being fastened to a back splint with a foot-piece, whose inner margin forms an angle of 25° with the vertical. Its great advantage is that the foot which results is a useful one, and one on which the patient can walk gracefully. The blood, which is poured out and which occupies the space left by the gaping of the divided tendons and other soft structures, organises, and in this dense cicatricial mass the proximal and distal portions of the tendons terminate, and if the case be carefully treated with plaster cases a useful foot is the result, which compares most favourably with the result obtained by the open method. I would assert with confidence that though the "complete" subcutaneous method is much more troublesome to carry out, it is at the same time also much more satisfactory in its results than the open method.

A factor of great importance in the treatment of the case after operation is to fix the foot in a position of abduction, this being the reverse of that occupied by the foot in the varus deformity, which is practically a posture of more or less extreme adduction. Now, in abduction of the foot its inner margin forms with the vertical an angle of about 20° or 25°; therefore to place the foot with its inner margin vertical, as is usually done, is not the best means of opposing its return to the varus posture. For this reason I always put the foot as far as possible in a position of abduction, preferring, if I can, to use a small back splint with a suitably fixed footpiece for the purpose.

St. Thomas's-street, S.E.

A CASE OF ABSCESS OF THE LIVER IN WHICH THE USE OF THE ASPIRATOR WAS MISLEADING IN DIAGNOSIS; OPERATION; RECOVERY.

BY J. CLEASBY TAYLOR, M.D. EDIN., M.R.C.S.

ON the night of Feb. 9th, 1893, a man was landed in Las Palmas from a homeward bound African ship, his most urgent symptoms being weakness and dyspnoea. He had resided on the West African coast for the past seven years and had enjoyed good health, rarely having any malarial attacks, though five years ago he was invalided to Las Palmas and came under my care for an attack of "blackwater fever." In April, 1892, when at Cape Coast Castle, he had an attack of dysentery which was neglected and which continued for some weeks. He never quite regained his strength, and left the coast in August for England, where on arrival he completely broke down, his chief symptoms being rapid loss of flesh and appetite and loss of sleep. At this time he began to notice a certain amount of breathlessness and a slight fulness in the epigastric region with a vague sense of uneasiness when lying down. Obtaining no relief and his condition being ascribed to the cold he sailed once more for Cape Coast Castle in November, 1892. He lived there for one month, during which time his breathlessness and a troublesome cough were the predominant symptoms. In the middle of January he was put on board the homeward mail as a case of advanced phthisis in the hope that he might reach Grand Canary. Two days before arriving at Las Palmas the dyspnoea became more urgent and with the cough there was purulent expectoration. When I saw him at an hotel he was extremely anæmic and

¹ This most important ligament I described in the Guy's Hospital Reports, 1886, p. 250.]