

Disease.	Age.	Obs.	MORNING.			EVENING.			
			Max.	Min.	Mean.	Obs.	Max.	Min.	Mean.
Secondary syphilis,	22	5	98	64	81	5	96	70	86
Dyspepsia,	21	4	87	72	79	4	102	84	94
Hysteria,	26	3	61	57	59	3	58	56	57
Id.	19	3	67	61	64	3	70	68	69
Id.	31	3	93	87	91	3	92	88	90
Id.	26	5	79	67	73	5	78	70	75
Hyster. paraplegia,	30	5	89	78	81	5	89	72	82

ART. X.—*Observations on the Use of Piperine in the Treatment of Intermittent Fevers.* By ROBERT HARTLE, M. D., Member of the Royal College of Surgeons, London, H. P. Deputy Inspector-General of Army Hospitals. (Read before the Medico-Chirurgical Society of Edinburgh on the 8th December 1840.)

INTERMITTENT fever is very common in this island and its town; yet this town of Port of Spain is the best laid out and the cleanest in the West Indies; but, as Dr Fergusson in his description of Trinidad states, the grand Savannah lies to the south-east of Port of Spain, and extends to its south-eastern borders, I am induced to believe that the marsh has in the dry season, or immediately on the rains commencing, some influence over the inhabitants, and more particularly over the residents of that part called Piccadilly, which is subjacent to its influence; for very few of those residing in this district are exempt from the malady. We have no disease in which there is so much susceptibility of a renewal as in intermittent, and in this island it is invariably an insidious and obstinate disease to subdue.

I have particularly remarked that sulphate of quinine oftentimes failed to eradicate the malady, although I had given it in ten grain doses, frequently repeated, beginning as soon as the perspiration commenced, without reference to the heat or feverish feel of the skin. It therefore occurred to me that the piperine would best answer the purpose of breaking the catenation of morbid symptoms which constitute the paroxysms of ague, and that, when that was accomplished, by combining it with the sulphate of quinine, it would succeed in removing the disease.

Accordingly, in all the cases of long standing, (many of them with an enlargement of both liver and spleen,) I began, as soon as the sweating stage was established, by giving three grains of piperine every hour, until eighteen grains had been taken; and on the following day, when the intermission was complete, I gave the same quantity every three hours. It has in every case succeeded

in checking the paroxysm, and as soon as that was accomplished, I gave for some days the following pills ;

℞ *Pilulæ Hydrarg.* gr. i. ; *Piperinæ*, gr. ii. ; *Sulph. Quinæ*, gr. ii. ; *Syrup com. q. s. f. M. f. Pil. no. 1. omni mane, meridie, et vespere capienda.*

I shall here subjoin a few cases of long standing intermittent, in which the piperine was given as soon as general perspiration commenced, without regard to the heat of skin or quickness of pulse.

1. Miss S., aged 18.—This young lady had suffered periodically upwards of two years with intermittent. It appeared that she had taken sulphate of quinine in great quantities and very large doses, with the effect of only subduing the disease for a short time. She had been removed to North America for change of climate, and every other means had been used to cure the disease, without success. Her father in conversation mentioned this to me, and I advised him to give the piperine ; and, accordingly, gave him the following prescription, with directions to begin as soon as perspiration became general, and that, should she escape the second paroxysm, the pills were to be continued every third hour.

℞ *Piperinæ* gr. v. ; *M. G. Acaciæ*, q. s. f. *M. f. Pil. no. 1. 2da quaque hora sumenda.*

It is now upwards of three years, and she has continued free of the malady.

2. Mrs C. aged 30, had had several severe paroxysms of tertian intermittent, but very irregular in its attacks. Infusion of bark as well as sulphate of quinine had been freely taken, but to no purpose. On the morning of the 17th April 1837, while taking a cold bath, she was seized with ague. I was sent for at 7 o'clock A. M. I found her shivering severely. I ordered warm drinks to be given frequently. At 12 o'clock the cold shivering continued, and the symptoms were alarming. The pulse was scarcely to be felt. The coldness was universal, clammy, and unpleasant to the touch. The lips were of a slate colour. The countenance was contracted, the eyes sunken ; and the patient evinced marks of great agitation and alarm.

I ordered hot flannels to be applied over the chest and abdomen, the legs and feet to be rolled up in hot cloths, and stone vessels filled with hot water to be constantly kept under her arms, and along the inside of the thighs and legs. Warm brandy toddy was ordered to be frequently given in small quantities. At 4 o'clock P. M., finding that reaction could not be brought on, I gave five grains of piperine, which was with difficulty swallowed ; and I washed it down with an ounce of brandy, in half a tumbler of champagne. I then ordered full doses of the aromatic spirit of ammonia every third hour, and the champagne to be continued.

At 6 P. M. reaction commenced ; and as the heat increased I

withdrew the hot applications, and suspended the stimulants. By 8 o'clock at night the heat was general, and in proportion to the cold stage. The following morning the sweating stage commenced; and, as soon as it was general, I began with five-grain piperine pills every second hour, and continued them for four days. She had no return of the disease; and for a few days I continued to give them four a day. She has never had a return since.

3. Mr W. aged 27. This young gentleman, a European, had, soon after his arrival in this island, about a year and a-half ago, a severe attack of remittent fever, which ended in tertian intermittent. He had taken a quantity of sulphate of quinine, which for a short time checked the paroxysms; but for three months, it had constantly returned every forty-eight hours, and so reduced his strength that he was unable to perform the duties of his occupation. In consequence, his employer directed him to call on me for advice. On examining him, I found his liver and spleen enlarged and hard, yet free from pain when pressed on. I ordered the following pills;—

℞ *Piperinæ*, gr. xxxvj. ; *Pilulæ Hydrarg.*, gr. xij. *M. f. Massa in pilulas xij. distribuenda. Quarum capiat unam 2dā quaque hora.*

And in case the bowels were not free, he was to take the following mixture;—

℞ *Sulph. Magnesicæ*, ℥iss. ; *Sulph. Quiniæ*, ℥ij. ; *Aq. puræ*, ℥xx. ; *Acid. Sulph. Dil.* ℥ij. *M. Hab. Cyathum pro re nata.*

It is now three months since he had an attack of the disease, and his health is perfectly restored.

I must here observe, that a number of patients object to taking the sulphate of quinine, in consequence of its affecting the head; but the piperine, although a powerful stimulant, carminative, and febrifuge, does not in the least degree affect the sensorium.

*Port of Spain, Trinidad, 21st Sept. 1840.*

ART. XI.—*Observations on the Therapeutic Action of Croton Oil in certain Nervous Disorders.* By P. S. K. NEWBIGGING, M. D., F. R. C. S. E., one of the Medical Officers of the New Town Dispensary, &c. &c.

THE cases in which croton oil has been chiefly administered have been those where an active purgative was considered necessary, the smallness of its dose allowing it to be given in circumstances where other effectual medicines could not be employed. Although mention is made by Dr Conwell of his having used the