

records, are perhaps not so uncommon as they are generally supposed to be.

I presume that these indefinite cases, which resemble pulmonary tuberculosis clinically and in which repeated examination of the sputum did not reveal any tubercle bacilli, should receive our best attention for a revision of diagnosis. A careful examination of the sputum for any fungal infection of the lung should always be insisted upon, while one should also remember the spirochaetal infection of the lung, *e.g.*, broncho-spirochaetosis Castellani—a disease which also resembles pulmonary tuberculosis clinically in many respects. In conclusion, it seems quite reasonable to remark that monilia infection in man can not only give rise to tropical bronchitis as described by Castellani, but also give rise to pleurisy and pulmonary asthma, the signs and symptoms of which were so conspicuously present in this case from the very beginning and subsided remarkably with the specific treatment of the infection. The organism seems to have a special selection for the basal portion of the pleura, as signs of diaphragmatic pleurisy was prominently present in this case.

It might be argued that as the infection of moniliasis is one of a tropical character, how the patient could get this infection while at home in England. Although it seems rather difficult to trace the infection, yet there is nothing to prove that he was not carrying the infection in his respiratory passage and that after an exposure to chill at home, the infection manifested itself into a disease.

*Acknowledgments.*—In conclusion, I beg to acknowledge my grateful thanks to Colonel R. P. Wilson, F.R.C.S., D.P.H., I.M.S., Professor of Surgery, Medical College, Calcutta, but for whose kind assistance and co-operation it would not have been possible for me to record this interesting case in all its details as the patient was under his careful treatment.

*N.B.*—After reporting the case mentioned above another case of broncho-moniliasis came under my notice in which the sputum contained the fungal organism, which, when examined and cultivated, showed all the characters of monilia tropicalis (Castellani). The sputum was kindly sent to me for examination by Major J. A. Shorten, B.A., M.B., M.R.C.P., I.M.S., Professor of Physiology, Medical College, Calcutta.

#### REFERENCES.

- (1) Manual of Tropical Diseases. Castellani and Chalmers. Third Edition.
- (2) *The Journal of Tropical Medicine and Hygiene*, 1920, January, Vol. 23, No. 1.

#### DESCRIPTION OF THE PLATES AND FIGURES.

*Plate I, fig. 1.*—A twenty-four hour pure culture of monilia in glucose agar slope showing thick opaque white discrete colonies.

*Plate I, fig. 2.*—The same after 12 days, showing the diffuse growth with wrinkling of the surface.

*Plate I, fig. 3.*—A fresh cover slip preparation of culture of monilia, 48 hours old, showing moniliform character of the growing hyphae containing endospores in them. (1/6 inch objective, No. 2 eyepiece.)

*Plate II, fig. 1.*—A fresh smear of the sputum stained with methylene blue showing the large number of yeast-like budding cells of monilia and the fragments of mycelium showing endospores in them. Some cocci and few bacilli and some pus cells and degenerated epithelial cells are present. (1/12 inch objective, with No. 3 eyepiece.)

*Plate II, fig. 2.*—A fresh specimen of the culture of monilia 4 days old, stained by Gram's method (with 1 per cent pyronin as the counter-stain), showing the cells as gram-positive and the growing hyphae and the mycelial filaments as gram-negative having endospores in them. (1/12 inch objective, No. 2 eyepiece.)

*Plate III.*—The temperature chart, showing the record of temperature from the 4th day of the disease, with the pulse and respiration count, and also the effect of treatment with big doses of potassium iodide.

## BILHARZIA IN MESOPOTAMIA.

By P. W. HARRISON, M.D.,

*Bahrein, Persian Gulf.*

For many years it has been known that bilharzia infection is common in Egypt and that country regarded as perhaps the only locality seriously infected with this organism. Sporadic cases have been recognised throughout Mesopotamia, and as far south in Arabia as Bahrein. For the most part these are cases of painless hæmaturia, the diagnosis being possible only with the microscope. For many years also there have been recognised certain centres in Mesopotamia where vesical calculus is astonishingly prevalent. The best defined of these is the Howeiza district, lying between the Karoon and the Tigris rivers. Politically it is within the boundaries of Persia, but racially the inhabitants are pure Arabs. From this district there flows a steady stream of stone cases to all the nearby hospitals, particularly those in Busrah, Ahwaz, and Amara.

In the hope of investigating the etiology of vesical calculus, a trip of two weeks was planned into the heart of this district. Circumstances reduced the two weeks to one. It is a place difficult of access, exceedingly primitive in habits, and practically unaffected in mind or body by the recent influx of civilisation into Mesopotamia as a whole. The inhabitants are "river Arabs" whose livelihood is gained principally by rice growing, in the low marshy flats which are flooded for four months or more in the spring. Their work in the fields thus exposes them to mud constantly, as do their habits in the town itself. We stayed in Beni Terrif, the largest

settlement of the district, a town of perhaps fifteen thousand inhabitants. Even out of the spring season, gathering grass for their buffaloes, manufacture of buffalo-dung fuel cakes, building mud walls, etc., keeps them quite constantly exposed to the mud of the place. It should be stated, however, that this town exposure is mostly limited to two classes, the children who play in the mud for fun, and the younger men who do the heavy work. It was late summer when we made our visit, and the work in the rice flats had long been over. In the mud exposure that we were able to observe, old men and women were notably absent.

With so much for an introduction, what we found may be stated with some brevity. The place is a nest of bilharzia infection. During our stay of a week, we treated as we could something over five hundred patients, and of that number one in six were suffering from obvious bilharzia infection. The Arab is very casual about bringing in a specimen of his urine, or co-operating in anything, the value of which he does not understand. However, we secured thirty specimens of urine, of which fifteen showed the typical bilharzia eggs. Many of them were very heavily infected. If we had brought our centrifuge, the negative results would almost certainly have been fewer.

The real incidence of the disease is much greater than these figures indicate. Inquiry elicited a history of hæmaturia more or less prolonged and severe from almost every adult man that we interviewed on the subject. Women seem much less affected. They came quite freely for other ailments, but we did not see a single case which gave any sign of bilharzia infection. Apparently the disease is essentially an infection of those who are young, and depends for its persistence on continual re-infection. In later years, probably because re-infection ceases, as exposure to the heavily infected mud of the town is less, there is a strong tendency to recover.

Not all escape so easily. In some a vesical calculus forms and persists. We were not able to examine every case with a searcher, and have no figures to offer, but the number of those developing a stone must be under ten per cent. of all infections. The stone cases that came to us were old men for the most part, with a very long history. We were unable to demonstrate bilharzia eggs in any of them. Their troubles, however, dated back to a typical experience of hæmaturia and urinary distress, prolonged through years. A longer visit would undoubtedly discover cases in which both eggs and a stone could be demonstrated.

The cases were treated with tartar emetic intravenously. The amount that it was possible to administer in a week was utterly inadequate of course. However, the experiences of this trip, and even more, some very fine work recently done by Dr. Borrie in Busrah, as yet unpublished, go far to show that we have underrated the tendency of this disease to spontaneous recovery. The amount given reached five and six grains in some

instances, and we think that it may be a real help towards a cure, even though of itself inadequate. We hope to visit the town a year hence, when it may be possible to ascertain the results.

## A Mirror of Hospital Practice.

### A CASE OF SNAKE-SWALLOWING IN AN INSANE.

By PRAKASH CHANDRA DAS, M.B.,

*Assistant Surgeon, Ranchi European Lunatic Asylum.*

It is well known that some insanes swallow all kinds of foreign bodies on which they can lay their hands. Thus in an article by A. W. Hois-holt, M.D., Superintendent, Napa State Hospital, Clinical Professor, Psychiatry, Stanford University, in the April number of the *American Journal of Insanity* of 1918, four cases are mentioned, wherein foreign objects have been swallowed to the number of (1) 1,149, mostly pins, nails, screws, buttons, small pebbles and pieces of glass, (2) 23 pieces of glass and a button, (3) a spoon and six bed springs and (4) two handles of tea spoons, respectively.

The following case is described owing to its extreme rarity, as we have not come across a similar case in the literature.

J. B. P., a European male, aged 42, transferred to this Asylum from Agra on the 11th October, 1918.

His physical health is excellent.

Wassermann reaction—Absolutely negative.

Diagnosis—Dementia præcox.

On the morning of the 31st July, 1920, immediately after he had passed stools in a commode in the ward, about 8 inches of a snake was found in his stools but minus its head. Every care was taken during investigation that no deception was practised either by the patient himself or anybody else. Either the head was removed before it was swallowed or passed in a previous stool.

The snake was identified by Mr. S. W. Kemp of the Indian Museum as a *Tropidonotus stolatus* (Linn.)—a non-poisonous fresh-water snake.

Only a month before this he was bitten by a snake for which he was treated with antivenene injections. The symptoms were evidently those of krait (*Cæruleus*) poisoning.

Before admission into an asylum he was bitten twice by snakes—once by a cobra and again by an unknown variety; for the first, he was treated with antivenene and for the second, no treatment was available.

It is interesting to note that this patient is always in search of snakes—nearly half-a-dozen times snakes were found in his pockets and socks—mostly grass snakes.