by our fellow workers, I have said sufficient, I hope, to demonstrate the existence of much remaining vitality in the world of surgery, and to justify the promise of still further triumphs to some.

BILHARZIA HÆMATOBIA IN CONNECTION WITH A FORM OF DYSENTERY IN EGYPT. . .

By JAMES MACKIE, M.B.,

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FROM what has lately been written on the subject of *Bilharzia* in connection with our expeditionary force to Egypt, one might be led to infer that *Bilharzia hamatobia* and endemic Egyptian hæmaturia are almost interchangeable terms, and that the one never exists without the other. This, in the great majority of cases, is true; but, it does not seem to have received the attention it deserves, that persons may suffer severely from the parasite without showing any symptom of hæmaturia or other urinary disorder. Many cases of supposed dysentery and severe internal hæmorrhoidal affections are caused by the presence of, and irritation caused by, multitudes of the ova of *Bilharzia hamatobia* imbedded in the walls of the rectum; and to this I wish to draw attention, as being of interest in relation to chronic dysenteric affections which may present themselves amongst our troops remaining long in the country. Many natives from the interior of Egypt present themselves for advice in our out-patient department at the Deaconesses' Hospital, complaining sometimes of "piles", sometimes of "dysentery", sometimes of "constant pain and weight in the rectum with tenesmus". Whatever name they may give to their complaint when asked what it is, they all complain pretty much of the same symptoms—viz., straining at stool, constant weight and discomfort, perhaps pain about the rectum, constant or frequent desire to go to stool, and passing only a little mucus and blood, pain at hypogastrium, emaciation, etc., having generally been ill for months before they apply. If closely inquired into, those cases hardly present a history of ordinary dysentery or hæmorrhoids; there is a something in the history more nearly resembling a mild form of malignant disease; but the history of the case can only be got from a native by those knowing their language and accustomed to examine them. To clear up the diagnosis: if the forefinger is introduced well up into the rectum—and it generally requires to be pushed up as far as it can reach—small, soft, but firm nodules will be felt, generally about the size of a small bean, often very numerous, and giving the impression to the feel of a small, well-defined sessile pile, but too high up for piles, and not hard enough for malignant disease. By introducing carefully along the finger a small hæmorrhoidal forceps, one of these small tumours can easily be twisted off for examination under the microscope, when its blood-vessels will be found to be filled with the ova of *Bilharzia hamatobia*; and in my own experience the ova found in the rectum have in nearly all cases the spike placed laterally, differing from those generally found in the urine, which have the spike at the extremity. The presence of *Bilharzia hamatobia* may be manifested by dysenteric symptoms, as I have already mentioned, without the patient ever having shown any sign of urinary disorder, or any ova being found in the urine after repeated and careful microscopic examinations.

One case, which was under my care last winter in the Deaconesses' Hospital, impressed me very much at the time—happening to be under treatment when a correspondence was going on between me and the directors of the Eastern Telegraph Company in Egypt, and the directors and Dr. Cobbold in London, regarding a number of cases of hæmaturia amongst the company's staff at Suez, which has already been referred to in the *Times* war correspondence, and lately by Dr. Cobbold in the *BRITISH MEDICAL JOURNAL* and elsewhere. Acting on advice in London, the directors of the company suggested that the urine of all the employees should be sent to me for examination from time to time, in order to detect the presence of the parasite as early as possible. In a letter to the company, I pointed out that the disease often existed without any evidence of it to be found in the urine. I instanced the case of the patient, an Arab above referred to, who happened to be under observation. The urine of this man was carefully and repeatedly examined for me by Dr. Murison, a most careful and accurate observer, by Dr. Vernoni, and by myself. We took every care to examine the last drop drawn from the bladder; we even irritated the bladder by the catheter to obtain a little blood; we never found a single ovum from the bladder, while his rectum was full of small tumours, each of which was crowded with ova. The man's sufferings were great, and state bad. He seemed to be, as I described it, infested with bilharzia, and never had had a symptom of any urinary disorder, according to his own statement, which I can confirm from observation while in hospital.

In all cases of what may be termed subacute chronic dysentery in people who have been some time resident in Egypt, and exposed to drinking unfiltered water, the rectum should be carefully examined by the finger pushed up as high as possible; and if small tumours, such as I have described, are found, they should be examined under the microscope.

THE EFFICACY OF VACCINATION.

By J. HIGHAM HILL, M.D., F.R.C.S.E.,

Special Medical Officer appointed by the Government during the recent Epidemic of Small-pox in Sydney.

DURING the late outbreak of small-pox in Sydney I had many very favourable opportunities of witnessing the great efficacy of vaccination as a prophylactic against that disease; and as in some respects the experience was remarkable, I hope that I shall not be considered a slayer of the slain in writing to bear additional testimony to such a well recognised fact. I think it will be generally conceded that, while sceptics of the efficacy of vaccination and antivaccination agitators exist, it is well that practitioners who have had special opportunities of personally observing that efficacy should place upon record their convictions on this important subject, together with some of the facts upon which they are founded.

In the first place, vaccination not being compulsory in the colony of New South Wales, there was a large amount of unprotected material in the shape of unvaccinated people, adults and children, for the disease to prey upon; and a feeling amounting almost to panic on its sudden and unexpected appearance in Sydney in June of last year.

Secondly. The measures adopted by the Government to prevent the spreading of the disease were unusual, and apart from the question of their intrinsic value, afforded peculiarly good opportunities of testing the protective influence of vaccination.

On a suspected case of small-pox being reported to the authorities, the house was at once visited by a member of the Government Medical Staff, specially appointed; and if, on examination of the individual, the suspicion proved well founded, the house and its inmates were immediately placed in a state of strict quarantine, and no unauthorised person allowed to leave it; special police arrangements having been made to enable this to be done under the Colonial Quarantine Act. If the affected person could not or would not be removed to hospital, as was frequently the case, the other inmates were in very many instances kept in the same house, there being often no accommodation for them in the "sanitary camp", which was erected some miles out of town near Botany Bay. The patient was isolated as much as possible, but the isolation which could be effected in small or overcrowded houses was practically nominal. Under such circumstances, the protection of the unaffected inmates and neighbours by prophylactic means was a matter of the greatest importance, and to the credit of vaccination I can safely assert that results proved it to be a protector equal to the occasion—very few vaccinated inmates of quarantined houses contracting this most infectious disease, and those few having as a rule very mild, modified attacks, although all were greatly exposed to the infection while living under depressing influences and bad hygienic conditions, being confined in small houses, with little or no opportunity for obtaining fresh air, exercise, etc. Many nurses were employed, but none contracted the disease, all having been protected by previous attacks or efficient vaccination before commencing their duties. On the other hand, in every instance where anti-vaccination prejudices could not be overcome, and although small-pox was in their houses, persons would not be vaccinated, or allow their children to be vaccinated, severe, and very often fatal, attacks were the rule without exception; and, when too late, these persons bitterly bewailed their ignorance and stupidity.

I could mention many cases where only the unvaccinated members of households were picked out by the disease and attacked, the others leading, as it were, "charmed lives," although exposed freely to the infection, and, as I have stated, under bad hygienic conditions, thus testing, with unusual severity, the protective power of their vaccination. And as with households so with neighbourhoods, as the following instances taken from many will show.

A woman, living in a semi-detached wooden house, was attacked with small-pox of the severe confluent type. Neither she, nor her husband, nor her daughter, aged 16, the only occupants of the house, had been vaccinated. I vaccinated the two latter as soon as possible; the daughter escaped altogether, although acting as nurse to her mother. The husband had a very mild attack, consisting of only half-a-dozen modified variolous pustules on the face and hands, with very little constitutional disturbance, and no secondary fever. Next door was a