BILHARZIAL CYSTITIS*

BY

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Cystitis is frequently seen in V.D. clinics, but the incidence of cystitis due to bilharzia is so low in Great Britain that this cause is not usually considered in the differential diagnosis. Moreover, delay in finding the causal organism may result from the venereologist's preoccupation with venereal disease as the cause of the patient's condition. Harkness (1950), quoting Goldschmidt (1948), stated that on cystoscopy the bladder shows small tubercles about the size of a pin's head similar to the tubercles produced by Koch's bacillus. Erosions, nodules, and papillomata, benign and malignant, may also be seen. The "sandy patches" seen scattered over the mucous membrane of the bladder are due to the coalescence of the pseudo-tubercles. Bilharzia infection may occur in the prostate, seminal vesicles, and bulbous portion of the urethra, giving rise to a sanguinary, egg-containing discharge. Infiltration of the erectile tissue of the penis causes pseudo-elephantiasis with chordee. Sanjurjo (1954) and Tidy (1945) state that ova may be found in the seminal fluid, but there is no mention of coital transmission of the infection. Sanjurjo (1954) also describes bilharzial lesions of the female genital tract. *Schistosoma haematobium* may also cause a urethritis, and this should be remembered in view of the many Africans, Arabs, Somalis, and others from East Africa and the Middle East now entering the United Kingdom. At this clinic patients from the above countries formed 17.50 per cent. of all patients in 1958, and 9.7 per cent. in 1959.

Case Reports

Case 1, an Arab aged 29 years, who had been living continuously in England for 3½ years, attended the clinic on June 13, 1959. Like many Arabs he was reluctant to be examined and as he spoke little English a history was difficult to obtain. He denied any recent exposure to venereal disease and stated that he had been living with the same consort for the past 2 years. He complained of dysuria and frequency for which his doctor had treated him with "tablets and a mixture", without improvement. It was found, however, that in

March, 1958, he had attended this clinic with acute gonorrhoea, was treated with 300,000 units penicillin, and had defaulted after the third attendance. There were no signs of any active venereal disease and the blood Wassermann reaction and Kahn test were both negative, but the urine was hazy in both glasses in the two-glass test. In view of the history of gonorrhoea and default, and of his having taken tablets before attending the clinic, re-infection with gonorrhoea seemed probable. An alkaline mixture was prescribed and he was told to attend next morning for films and cultures. No discharge was seen when he attended and a urine specimen was sent to the laboratory for culture and examination of the deposit. Pending the return of the laboratory report he was given Sulphamethiazole, two tablets three times a day for 6 days. On June 30, 1959, he first complained of seeing blood in his urine. In the meantime the laboratory had reported:

"Urine—slightly turbid, reaction acid, albumen, slight haze. Wet film large numbers of pus cells and red blood cells. Culture sterile".

The complaint of blood in the urine (particularly in an Arab), sterile on culture and containing pus cells and red blood cells, led to bilharzia being considered as the cause. On July 1, 1959, the first morning specimen of urine contained blood-stained threads. Preparations of the threads were stained and examined in the clinic and many ova of *S. haematobium* were present (Figure, opposite).

The liver and spleen were not enlarged but the differential white blood count showed an eosinophilia of 12 per cent. The patient was started on a course of Stibophen and after seven injections complained of cough and dyspnoea. He said that he was also receiving what seemed to be treatment for asthma but was unable to say if the attacks had started before or after commencing Stibophen injections. It was noted by Tidy (1945) that coughing may occur with Stibophen. The dose was reduced from 5 to 3 ml. On July 20, 1959, his doctor referred him to the Mass Radiography Centre because of his persistent cough, and the X-ray report stated:

"Increased vascular markings; there is a small ill-defined opacity at the periphery of the right first interspace which may represent a minimal tuberculous lesion".

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FIGURE.—Bilharzia ova in urinary thread. $\times 480$.

Rogers and Megaw (1944) state that latent bilharzial involvement of the lungs may be seen radiologically, and the question then arose whether this lesion was tuberculous or bilharzial. On July 22, 1959, the patient complained of a boil on the right thigh. As he could not attend for a course of penicillin he was given PAM 600,000 units plus the Stibophen. That afternoon he became very breathless with a feeling of impending death, but he responded to antihistamine treatment administered by his own doctor. This posed the further question whether this was a severe attack of asthma, a reaction to Stibophen, or anaphylaxis due to the penicillin. The patient was admitted to Lodge Moor Hospital on August 5, 1959 (by which date a total of 42.5 ml. Stibophen had been administered) with increasing bronchospasm. The condition rapidly cleared with prednisolone, and on September 5, Dr. Anderson of Lodge Moor Hospital stated verbally that the chest was quite normal. It is therefore reasonable to assume that the chest lesion was bilharzial in origin. A further 25 ml. Stibophen was given (bringing the total to 67 ml.) and there were no ill-effects.

The patient was discharged from Lodge Moor Hospital on September 14, 1959, when ova were still present in small numbers. A chest x ray on September

21, showed "No evidence of disease of the chest", and ova of bilharzia were not found in a urine specimen.

Case 2, an Arab who had been in England for 3 years and 10 months, attended the clinic with acute gonorrhoea. The urine was hazy in both glasses of the two-glass test, and blood-stained threads were also found. Preparations of the threads were stained and examined in the clinic and the ova of bilharzia were found. The liver and spleen were not enlarged. On questioning, the patient stated that he had had "dark water" in Aden 9 years ago, but had received no treatment. The gonorrhoea responded to one injection of 300,000 units penicillin and a course of Stibophen was commenced. On September 11, 1959, preparations of the threads showed no ova.

Summary

The presence of blood-stained threads or blood in the urine of anyone who has lived in the Middle East should strongly suggest urinary schistosomiasis. Two cases of cystitis due to bilharzia are described.

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Cystite à bilharzia

Résumé

La présence de filaments sanguinolents ou de sang dans l'urine de toute personne ayant vécu dans le Moyen-Orient devrait vivement suggérer une schistosomiase urinaire. On décrit deux cas de cystite due à la bilharzia.