TRICHOMONAS AND VAGINAL DISCHARGE

BY

ERIC W. ASSINDER, M.D.

DIRECTOR, V.D. DEPARTMENT, THE GENERAL HOSPITAL, BIRMINGHAM

The purpose of this communication is to emphasize:

1. The frequency with which trichomonas is associated with vaginal discharge.
2. That very commonly trichomonas vaginitis is wrongly diagnosed as gonorrhoea.

Although the parasite was described as long ago as 1836 by Donné,¹ and for some years American writers have been insisting upon its importance as a cause of leucorrhoea, it is remarkable that in this country it is not generally recognized, and by many it has been scarcely heard of. Bland, Wenrich, and Goldstein² found the trichomonas in 22.7 per cent. of 600 cases of pregnancy, but far less frequently in white than in coloured women; they are insistent upon the fact that the morbidity rate is much higher when trichomonas infection is present in pregnancy. Reuling³ found the parasite in 18.4 per cent. of 250 patients who complained of leucorrhoea.

In the Venereal Diseases Department at the General Hospital, Birmingham, we have occasionally examined for trichomonas for some years past with varying success, but since November last we have adopted a different method of diagnosis. In the nine months since then in no fewer than sixty-one patients who have attended this department (as cases of gonorrhoea or suspected gonorrhoea) trichomonas has been found. In fifty of these sixty-one cases no gonorrhoea has been present, and in eleven gonorrhoea has been present in addition to trichomonas.

Diagnosis and Morphology

Previous to 1934 the diagnosis of trichomonas was made with the ordinary microscope. Looking back, and with our present knowledge, it would seem that failure to find the parasite was frequent in cases where in reality it was present. In my opinion by far the most effective method of detection is by the use of the dark-ground condenser microscope; a loopful of pus is placed on a slide, under a coverglass, and examined at once. By this means the movements of the flagella of the protozoa make for

rapid and easy diagnosis, even when the organisms are present in small numbers and almost obscured by pus, epithelial cells, etc. For permanent specimens films may be fixed by Schaudinn's fixing solution and stained by some appropriate method; my best results have been obtained with Geimsa's stain, although the flagella do not stain particularly well.

With the dark-ground microscope the parasite is seen to be a protozoal flagellate ten to thirty microns in length, round, oval, or irregular in shape. There are usually four anterior flagella, an undulating membrane can sometimes be seen, reaching from the front to about the middle of the body, and a posterior protrusion of protoplasm is also sometimes noticeable (see illustration).

Clinical Signs and Symptoms

These are often very typical and can be summed up

briefly as soreness and redness of the vagina and vulva, with a muco-purulent discharge. In some cases gonococcal or other infection is co-existent with the trichomonas infection, in which case cervicitis and urethritis may be present; but in non-complicated cases cervicitis and urethritis are not prominent features. Most observers agree that, although the signs and symptoms may vary greatly in intensity, practically all cases affected show some abnormal vaginal discharge.

Although from the history of cases trichomonas infection does appear to be associated with sexual intercourse, I have not been able to

Trichomonas vaginalis (dark-ground illumination). Drawn from actual field.

find the organism in the genito-urinary system in contact cases. In several contacts it has been noticeable that mild urethritis and sometimes prostatitis has been present, but in each of these, although a prolonged search has been made, definite trichomonas has not been seen. The parasite had been found in the urine from a male case by Marchand⁴ as long ago as 1894, and since by other observers.

Treatment

Many methods of treatment have been tried for this condition. At the General Hospital, Birmingham, we have tried numerous remedies which have been advocated. I have no hesitation in saying that the best results have been obtained by the use of Bayer's devegan tablets.*

* Devegan is an arsenical compound, and signs of intolerance, such as gastro-intestinal symptoms, should be watched for; these do occur occasionally.

two tablets, inserted once or preferably twice daily and used in conjunction with an alkaline or a 1 in 1,000 potassium permanganate douche, have relieved the condition quickly. It must be realized, however, that unless treatment is continued for from two to three months relapses are almost certain to occur. In my experience glycerin compounds should not be used, as the organism appears to thrive in this medium.

REFERENCES

- ¹ Donné: *C. R. Acad. des Sci.*, 1836.
- ² Bland, Wenrich, and Goldstein: *Journ. Amer. Med. Assoc.*, January, 1931, xcvi, 157.
- ³ Reuling: *Arch. f. Protistenk.*, 1921.
- ⁴ Marchand: *Zentralbl. f. Bakt.*, 1894.

EPIDEMIC CERVICAL ADENITIS

BY

S. LEVY SIMPSON, M.D., M.R.C.P.

PHYSICIAN TO WILLEDEN GENERAL HOSPITAL; ASSISTANT PHYSICIAN,
PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN*With a Bacteriological Report by*H. W. SCOTT-WILSON AND F. KELLETT
M.B., B.CH. M.B., B.CH.

In January of this year Reginald Miller described an outbreak of "epidemic streptococcal adenitis." Ten children and two young adults were affected. The major features were a sudden onset, high fever, prostration, painful enlargement of the tonsillar and cervical glands, with a relatively slight inflammation of the throat, and recurrent rigors. The major symptoms were sometimes preceded by a stuffiness of the nose and sore throat for two days. There also appeared to be "a close association between epidemic adenitis of this type and influenza."

The worst of the illness was over in five to ten days, but the complete disappearance of the fever was a matter of three or four weeks. Miller observed that the epidemics occurred during the influenza season of the last two winters, and that "Cameron is, so far as I am aware, the only medical author who has recently called attention to this group of cases."

Cameron (1935) considered streptococcal adenitis as "one of the very common disorders of childhood, and yet one which, for some reason, has received inadequate description in textbooks, both of general medicine and paediatrics." He believed that this might explain the frequent confusion with glandular fever, in which disorder he states that the patients are not as a rule very ill, suppuration is almost if not quite unknown, profound anaemia, delirium, and excessive sweating are not found. "The differential diagnosis from streptococcal adenitis is therefore clearly and sharply defined."

In the small "house epidemic" herein described the clinical features are similar to those described by Miller and Cameron. It consisted of two children and four adults in one household, and another child who shared the same desk at school. By coincidence both households were those of doctors, who have kindly helped the writer in supplementing brief notes made at infrequent visits.

Case I

On March 3rd the patient, a girl aged 6 years, appeared to be starting a "head cold." In the evening she complained of generalized headache, which was much worse on the next day, when she remained in bed with a temperature of 102° F., sore throat, earache, drowsiness, and pains in the back and legs. The conjunctivae were injected and photophobia was a prominent feature. There was some stiffness of the neck and the glands of the anterior and posterior triangle were

slightly enlarged. Kernig's sign was said to have been equivocal.

On March 5th the pyrexia continued, the throat and ears were less troublesome, but the patient was drowsy and complained of headache. The next morning the patient appeared to be well, with a normal temperature, and went out mid-day for a short while. Although the evening temperature was only 99° F., the patient spent a restless night and was ill the next day, March 7th, with right earache, sore throat, running nose, headache, slight photophobia, and a temperature of 101° F.

On March 8th the temperature was normal and the patient better. Some nose bleeding occurred. The next day there was a further relapse, with sore throat, earache, pyrexia (102.2°), and considerable enlargement of the cervical glands. These involved the tonsillar glands, the anterior and posterior cervical glands on both sides, and the occipital glands. The cervical chain of glands was larger on the right side than on the left, and all were spontaneously painful, but especially so on palpation. To ease the pain the neck was held in a fixed position, at first with head retraction and later on as in acute torticollis. The tonsils were not large but somewhat embedded and slightly red. Tonsillectomy had never been performed. The ear-drums were infected, but not bulging (E. A. Peters). This acute condition persisted for a further three days, the patient being somewhat collapsed and drowsy.

On March 13th the temperature fell to normal and the glands began to subside. On March 16th and 17th there was a transitory relapse, with sore throat, further enlargement of the glands, and pyrexia of 102°, but subsequently uninterrupted recovery occurred. The glands, although decreased in size, did not disappear for another two weeks, and the patient appeared pallid and lacking in strength. Intermittent hiccups were observed in the third week of the illness. Blood count on March 10th: haemoglobin, 75 per cent.; erythrocytes, 4,060,000 per c.mm.; colour index, 0.92; leucocytes, 22,000 per c.mm., with 75 per cent. polymorphonuclear cells and 24 per cent. lymphocytes.

Case II

A woman aged 27, in the same household as Case I, felt very ill on March 9th, with shivering, severe headache, photophobia, sore neck, enlargement of the submaxillary lymphatic glands, intermittent earache, pains shooting down the cervical spine from the base of the skull, extreme drowsiness, and a temperature of 101° F. There was a history of previous head colds from February 11th to March 4th, but from that date until March 9th, which appears to be the commencement of the illness, the patient had no symptoms other than being "below par."

On March 10th the glands in the neck were larger, and small, tender glands appeared in the groins, axillae, and above the elbow-joints. The base of the skull was acutely tender. Perspiration was profuse, and the patient felt very ill. On March 11th the temperature fell to normal and the glands began to subside. From then on there was gradual recovery, but for another ten days the patient complained of general weakness and intermittent severe headaches. The latter were said to start at the base of the skull, travel over the top of the head to the root of the nose, and finally form a horizontal band around the base of the skull. The patient had had tonsillectomy as a child, and the throat did not appear inflamed; nor was sore throat a feature of the illness except in mild, transitory form.

On March 18th an erythematous rash was observed on the face, neck, thighs, and upper arms, and disappeared within twenty-four hours. On this day and the next there were bouts of obstinate hiccuping. At this time there was a transitory recurrence of painful enlargement of the cervical glands. At no time was the spleen palpable. On March 20th profuse epistaxis occurred.

On March 23rd there was a rise of temperature to 99.4°, with slight generalized colicky abdominal pains, diarrhoea, and some tenesmus. These symptoms persisted for a few days. There was then also a further transitory painful enlargement of the occipital glands; the subsequent recovery was uneventful, lassitude and pallor being features of the convalescence.