REITER'S DISEASE

BY

C. R. BAXTER, M.B., Ch.B., M.R.C.P.

Physician, Hillingdon County Hospital

The recent article by Jackson and the case report by Wrigley on the syndrome known as Reiter's disease (*B.M.J.*, 1946, 2, 197, 199) will no doubt have stimulated clinicians to review in retrospect a number of hitherto obscure cases. It will be remembered that the disease is characterized by the triad of non-specific urethritis, arthritis, and conjunctivitis, with the occasional accompaniment of keratoderma blennorrhagica, haematuria, and diarrhoea.

A. M. H. Gray in his article on keratoderma blennorrhagica (*Med. Annu.*, 1941) quotes Epstein as associating this disease with inflammation of the joints and eyes and discussing its relation to psoriatic arthritis, believing the two conditions to be distinct; for, whereas psoriasis more usually appears on knees and elbows and sometimes on trunk and extremities, the lesions of keratoderma are entirely confined to soles and palms. This view, he goes on to point out, is further confirmed by Taylor, who describes the condition as one secondary to severe polyarthritis and posterior urethritis of gonococcal origin. Gray further quotes Combes, Dietrich, and Cohen, who, after minutely describing the skin lesions, point out that the arthritis is not of the more usual monarticular variety seen in gonococcal infections but a polyarthritis which involves chiefly knees, ankles, wrists, and acromio-clavicular joints, and which, further, shows less than the usual periarticular oedema and inflammation.

Reports of cases of Reiter's disease are so few that the occurrence of a case which in retrospect fits closely into the clinical picture would appear to justify its publication.

Case Report

The patient was an English soldier of 41 who was admitted to Hillingdon County Hospital on Dec. 12, 1945, with the following history. Until the beginning of August, 1945, he had been in perfect health and had not—and in this he is to be believed—run the risk of venereal infection. About Aug. 1, while serving in Norway, he developed an acute conjunctivitis, which became purulent within a short time and for which he received local treatment. He was repatriated on Sept. 6 and admitted to another hospital, where the conjunctivitis, still acute, was treated with penicillin drops. A few days after his admission an acute purulent urethral discharge made its appearance; he had never had such a thing before. Repeated examinations of the discharge failed to reveal the presence of gonococci, and serological examinations were likewise negative. Parenteral penicillin resulted in complete disappearance of the discharge in five days; nor was there any recurrence. Three months after the onset of the conjunctivitis the patient developed an intra-ocular haemorrhage in the right eye, and a few days later iritis in the same eye. The iritis ran its usual course of ten to twelve weeks, and settled down only to recur after his admission to this hospital, as will be described later.

Four months after the original conjunctivitis joint symptoms were first complained of, the ankles, knees, and shoulders becoming stiff but exhibiting no signs of redness or swelling. Not until two weeks later was the first sign of swelling noted—in the second left metacarpo-phalangeal joint—and the temperature for the first time was found to be above normal. At approximately the same time that joint symptoms first became manifest a scaly eruption of the soles was observed.

On Dec. 12 the patient was admitted to this hospital, and his condition was then as follows. He was somewhat thin, and arms and legs showed wasting consistent with a prolonged stay in bed from subacute arthritis. The ankles were swollen and painful and only slightly red; the knees were stiff and painful but not swollen; the left shoulder and elbow were in a similar condition, and the only other affected joint—the second left metacarpo-phalangeal—was swollen, slightly red, and very painful. There was a thick scaly eruption of both soles, which was misdiagnosed as psoriasis in spite of the absence of other skin lesions, and under the free edges of the nails of some of the fingers was a collection of dry cheesy material. The conjunctivae were slightly inflamed, but there was no crusting of the lids. The right eye showed signs of old iritis, with a fixed irregular pupil and posterior synechiae. There was no urethral discharge and the urine was normal. Examination of the other systems was negative, but the E.S.R. was 106, and the gonococcal complement-fixation test and Wassermann reaction were both negative. The temperature on admission was normal.

A course of "myocrisine" was started on Dec. 31, to which the response was satisfactory in that, the day after each injection, increased pain was experienced in the affected joints, and a slow but steady improvement in mobility and pain took place so that two months later the patient was once more able to walk. Since then there has been no relapse, and on Sept. 13, 1946, the only sign of trouble is a persistence of some swelling and stiffness of the metacarpo-phalangeal joint.

A recurrence of iritis of the right eye took place on Jan. 31, 1946, resolving in the course of ten weeks with the help of hot bathing and instillations of atropine, "protargol," and other eye drops. On May 8 the left eye developed iritis, which resolved in about eight weeks. At the time of the last examination, on Sept. 13, there was no sign of inflammation in either eye, although synechiae persisted.

The scaly eruption of the soles continued *pari passu* with the joint lesions, and at one time it caused considerable distress from the foul odour arising from the layers of dead skin. Treatment with Condy's-fluid baths and the use of a detergent ointment resulted in some improvement, but as the joints cleared so did the skin, and now there is no trace of it on the soles; under three nails on the hands there is a small collection of dry cheesy material.

During the first twelve weeks after admission he ran a slight irregular temperature—never above 98.8° F. (37.1° C.).

The patient has recently been readmitted to have an operation for hammer toe, and, apart from the few signs mentioned above, he now shows no trace of the illness which started just over a year ago. Weight and colour have returned, and he looks forward to being able to restart work soon.

Comment

The interest in this case lies in the exhibition of all the symptoms of the disease except for the diarrhoea and haematuria, as well as in the sequence in which the symptoms made their appearance—conjunctivitis, urethritis, then polyarthritis and keratoderma coincidentally, with recurrent iritis as a concomitant. In view of the complete clearance of symptoms and signs as reported in other cases, it is doubtful if the treatment given in this case had any effect if we except only the rapid clearance of the urethral discharge with penicillin.

I have to thank Dr. W. Arklay Steel, medical director of Hillingdon County Hospital, for permission to publish this report.

Medical Memoranda

Perineal Suture in Obstetric Practice

In my practice the patient is generally delivered lying in the left lateral position, even when delivery is instrumental, as it is easier when one is single-handed. In this position, satisfactory as it is for the delivery, visualization and suture of a perineal laceration are difficult, since the raw edges tend to fall together and it is far from easy to locate the upper end of the vaginal part of the tear. In an attempt to solve this difficulty the method described below has been evolved. The basis of the technique is insertion of two deep tension silkworm-gut sutures placed longitudinally on each side of the perineum before delivery of the child. The insertion of these sutures is made near the end of the second stage in such cases as (1) where perineal laceration may be expected; (2) where episiotomy is necessary; and (3) where there is marked stretching of the perineum.

TECHNIQUE

Two semi-curved Hagedorn needles are threaded with strong silkworm gut. The area round the perineum is thoroughly sterilized by washing the part with biniodide solution. The index and middle fingers of the left hand are inserted into the lower third of the vagina, and then separated in fanlike manner in order to protect the presenting part and also to draw the perineum forwards. The needle is inserted through the perineal skin about 1/4 in. (6 mm.) from the midline and 1/4 in. from the muco-cutaneous junction, the point passing deeply into and through the vaginal mucosa. The needle then travels within the vaginal cavity, re-entering the deep tissues 2 in. (5 cm.) nearer the vaginal vault and emerging through the perineal skin 1/2 in. (1.25 cm.) above and lateral to the anus. Within the vagina the suture lies on the mucous membrane and the lower end traverses the muscles surrounding the anus. The suture is repeated on the other side of the perineum, and both stitches are secured by clamping the free ends of the silkworm gut with artery forceps. With these stitches in position the delivery of the child is completed. Should a laceration have taken place or an episiotomy been necessary the inspection of the wound and the estimation of its extent can easily be carried out by traction on the two lateral