SYPHILIS (Clinical)

In a previously published paper (LEJMAN, K. (1963), Przegl. derm., 50, 1), cases were described of pyogenic skin infection imitating primary syphilis (pyoderma chancriformis) or chancreoid (pyoderma chancriformis acuta). The authors now report on three cases in which secondary infection with pyogenic organisms (Ps. pyocyanea in one and Staph. aureus in the other two) modified the appearance of the primary lesion and rendered difficult the detection of T. pallidum. The latter was detected in two of the patients only after repeated dark-ground examinations over several days. In all three cases the lesions were unusually large (in one patient the ulcer on the shaft of the penis was 5 x 6 cm. in diameter) and the inguinal lymph-nodes were grossly enlarged and painful on one or both sides; the serological tests for syphilis were positive. Healing of the lesions was very slow and was not complete after treatment with penicillin over 21, 25, and 28 days respectively, although by then the serological tests reverted to negativity or showed a marked fall in titre. The authors suggest that the disappearance of T. pallidum from the primary lesion in cases of massive secondary invasion by pyogenic organisms is due to the destruction of the syphilitic granulation tissue by suppuration.

L. Z. Oller


SYPHILIS (Therapy)


SYPHILIS (Serology)


Preliminary Experience and Results with the Fluorescent Treponemal Antibody (FTA) Test. (Erste Erfahrungen und Ergebnisse mit dem FTA-Test.) MEYER-ROHN, J. (1964). Hautarzt, 15, 673. 4 refs.


SYPHILIS (Pathology)

Sections of the liver from a prematurely stillborn syphilitic foetus were impregnated with silver by Levaditi's method and examined histologically. Besides numerous treponemata in the hepatic tissue and in the walls of small arteries and veins, very many were found inside the lymphatic vessels in the region of the porta. Microphotographs show the treponemata in clumps suspended in an amorphous medium, thought to be coagulated lymph, completely occluding the lumen of the vessels. The occlusions most probably occurred when the foetus was still alive. This distribution of T. pallidum confirms that the lymphatics play a significant role in the spread of syphilitic infection in the foetal tissues. L. Z. Oller

GONORRHEA

In a survey of the clinical features of gonococcal arthritis in the antibiotic era the authors studied the records of 260 patients admitted to the John Gaston Hospital, Memphis, Tennessee, with that diagnosis during the years 1947–60. In 168 cases the diagnosis had not been confirmed bacteriologically and these were rejected, leaving 92 cases, of which 77 were in females. The average age of the patients was 21-8 years; the youngest patient was 6 years old (with gonococcal vaginitis) and the oldest 72 (with chronic gonococcal prostatitis). Only 33 of the patients gave a history suggesting gonorrhea.

Prodromal symptoms (fever, sweating, and headache) occurred in 75 per cent. of cases. The joint most commonly involved was the knee, one or both being affected in 53 cases (57·6 per cent.). Arthritis of the wrist occurred in 45 patients (49 per cent.), of the ankle in 37 (40-2 per cent.), of the elbow in 27 (29·4 per cent.), of the shoulder in 24 (26·1 per cent.), and of the foot in only eleven (12·2 per cent.). There were signs of inflammation of only one joint in eighteen cases, of two joints in 22, and of three or more joints in the remainder (over 60 per cent. of cases). Monarticular arthritis affected a joint on the right side in twelve cases and on the left side in six. In 79 cases a leucocyte count had been carried out before the start of treatment and in about 75 per cent. of these there were more than 9,000 leucocytes per c.mm. The average erythrocyte sedimentation rate (Wintrobe), measured in 68 cases, was 46 mm./hr. before antibiotic treatment. Blood cultures (25 instances) gave negative results. Cultures of the synovial fluid gave positive results in 28 cases; cultures of urethral or cervical material, or of both, gave positive results in all 92 cases. The electrocardiogram was normal in 39 out of 55 patients so examined; of the sixteen abnormal tracings, twelve showed tachycardia, including three which showed changes compatible with acute myocarditis. Radiological studies were made in 58 cases; various degrees of localized osteoporosis were common and in one case there was a small area of articular destruction of the first metatarsal joint with elevation of the periosteum.

Treatment was started with intramuscular injections of crystalline benzylpenicillin given every 4 to 6 hours to a total daily dosage of 1-2 to 2-4 mega units. After the first sign of therapeutic response this regimen was changed to 12-hourly injections of procaine penicillin. On the average, treatment was started on the eighth day of arthritis in the 81 cases in which the duration of joint symptoms could be established. In the 44 cases in which it was possible to determine the period of treatment required for complete remission of symptoms, the average was 6 days. “Almost all” patients were examined one month after discharge from hospital and “most” were followed up for periods of 6 months to 10 years after cure of the gonococcal arthritis. In one of the patients tuberculous arthritis developed, but none developed rheumatoid arthritis or a
joint condition consistent with a diagnosis of Reiter’s syndrome or of collagen disease.

In considering the differential diagnosis, the authors emphasize that gonococcal arthritis tends to become localized in one or two joints during the initial stage of polyarticular migration. They suggest that the term “pseudomigratory arthritis” should be used to define this type of joint involvement, which seems characteristic of gonococcal arthritis although it occurs in other forms of septic arthritis.

[The full text of this interesting article appears in both English and Spanish. Eight of the nine tables appear in the Spanish version only, but the legends are written in both languages. It is a pity that culture of synovial fluid was attempted in only 28 cases and that details of the methods used are not given. The facts that most of the patients were women and that only one suffered from “slight conjunctival infection” and only one from a “kerato-blepharorrhagic skin lesion” strongly support the view that most of these patients were suffering from gonococcal arthritis rather than from Reiter’s disease.] Eric Dunlop


NON-GONOCOCCAL URETHRITIS AND ALLIED CONDITIONS


CHEMOTHERAPY


The incidence of sensitivity reactions to penicillin has been estimated at 5 per cent. and it has therefore been advocated that routine tests for sensitivity should be carried out before penicillin is administered. Unfortunately the use of penicillin itself, which is not a good antigen, may not give a reliable result and even the small test dose may precipitate a reaction. A number of derivatives of penicillin or its degradation products have been tried in order to find a material capable of evoking a response in sensitive subjects without precipitating a reaction; of a number of agents penicilloyl-polylysine was found to be the most suitable. It has the advantage that it can be prepared in exact strength for intradermal injection. In this paper from the Communicable Disease Center, Atlanta, Georgia, the authors report the results with this reagent in intraderal skin testing of 16,239 patients at eight centres, seven being venereal disease clinics.

It was found that, of 1,003 patients who gave a clear-cut history of sensitivity to penicillin, 39-5 per cent. gave a positive reaction to penicilloyl-polylysine, whereas, of 12,559 patients who gave no history of penicillin sensitivity, 6-2 per cent. gave a positive reaction, as did 3-6 per cent. of 1,798 patients who denied previous penicillin treatment. Penicillin was administered therapeutically to 13,530 patients giving a negative response and 0-5 per cent. had a reaction, but of 418 patients in whom there was a positive response approximately 7 per cent. reacted to therapeutic penicillin. The reaction rate was considerably higher in patients with the most marked positive reactions to penicilloyl-polylysine and the chance of a reaction to penicillin in these patients was twenty times greater than in patients who did not respond to the skin test. Only five reactions were reported among the 16,239 patients tested which could be attributed to the penicilloyl-polylysine test dose.

The authors suggest that this test could be used for the routine determination of penicillin sensitivity before treatment with the antibiotic is started. Although the test is not at present absolutely reliable the technique could be readily modified, since the strength and amount of material injected can easily be varied. At the moment it is the most reliable test material available. R. F. Jennison


PUBLIC HEALTH AND SOCIAL ASPECTS
