Short Case Reports

Secondary syphilis with chickenpox in an adult

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When syphilis coexists with other infections, these are usually other venereal diseases, or at least sexually-transmissible diseases. Of 2,610 patients treated for gonorrhea at the Boston City Hospital from January, 1965, to December, 1967, 3 per cent. were found to be infected with syphilis (Fiumara and Austen, 1969). Some patients presenting with herpes proctitis (Fiumara, 1970) later exhibit signs of primary or secondary syphilis. The female patient with secondary syphilis often has a mixed infection with trichomoniasis or moniliasis, the latter particularly if the patient is taking oral contraceptives. Such double infections are commonplace to the venereologist, but who would suspect the coexistence of syphilis with chickenpox when the patient is adult? The following report illustrates such a case.

Case report

On January 26, 1970, a 25-year-old Negro male, obviously ill and with a rash, came to the Skin Clinic at the Boston City Hospital. He complained of having been ill with the 'flu' for the past 4 days; the first symptoms were headache, sore throat, and generalized aches and pains, particularly in the back, followed one day later by a rash on the scalp, face, and chest. The rash was itchy, particularly on the scalp, and was becoming more profuse when he came to clinic. The body temperature was 101°F. There was anterior and posterior cervical as well as bilateral, discrete, non-tender inguinal adenopathy. There were pustules in the scalp and behind the ears; scattered over the face were discrete papules, vesicles, and pustules. The anterior chest wall presented a diagnostic picture in that in any one segment were found the four stages of lesions, macules, papules, vesicles, and pustules. The papules and vesicles which extended into the poles of the axillae were surrounded with a halo of erythema; a few appeared on the arms and there were scattered lesions on the abdomen and thighs. There were no lesions in the mouth, and the pharynx was diffusely erythematous. The clinical diagnosis of chickenpox was quickly made and a Tzanck test, a scraping from the base of one of the fresh vesicles stained with Wright's stain, revealed multinucleated giant cells as seen in chickenpox (Zoster) and herpes simplex, and confirmed the diagnosis.

It is our practice to perform a routine blood test for syphilis on every teenager and adult coming to the Skin Clinic. The blood Hinton test on this patient was reported as reactive in a dilution of 1:32. The patient was requested to return to the clinic as soon as possible, and he came on February 9, 1970, 2 weeks after his first visit. He was afebrile. The cervical and inguinal nodes were as reported at the first visit, but in addition to residual crusting at the sites of the previous chickenpox eruptions, there were fresh papular and pustular lesions on his face, back, arms, forearms, palms, soles, abdomen, and chest. The papules were discrete, hard, and indurated, without the halo of erythema. There were pustules and pustules on the shaft of the penis and scrotum; these papules were tense and indurated, but unruptured; at the perianal areas there were erosive papules of condylomata lata. A darkfield examination of serum from one of the perianal lesions, showed abundant Treponema pallida. The patient was diagnosed as having secondary syphilis and was treated with penicillin.

Comment

Chickenpox is primarily a disease of childhood, about 90 to 95 per cent. of cases occurring in children under the age of 10 years; the highest attack rates occur in those aged 5 to 9 years and then in those under 5 years. The next largest group comprises those aged 10 to 14 years, only 2 per cent. being found in persons aged 15 years and older. Practically all the late teenagers and adults with chickenpox examined at this hospital have come from Caribbean islands or from the southern states. Our patient came from the rural South and had no history of having had chickenpox.
Syphilis with chickenpox

Unlike the child patient, the adult with chickenpox is acutely ill, and the prodromal period is longer and more severe, with fever, headache, generalized body pains, and in particular low back ache. The rash appears quickly, first with pink macules which become papules with a halo of erythema in a matter of hours. Within the first 24 hours, a vesicle appears on top of the papule and enlarges so that the entire papule becomes a vesicle within a zone of erythema, picturesquely described as 'a dew drop on a rose petal'. On the second day of the eruption, the vesicles become cloudy and then pustular, and on the third day of the rash, some of the pustules break and crust. There are usually three or four crops, the disease is ordinarily over in a week, and after about another week the crusts fall off completely. The patient is infectious for one day before the rash appears and for as long as fresh vesicles develop; the crusts are not infectious. An adult's rash may crop for 12 to 14 days, or even longer if corticosteroids or antimetabolites are being taken.

The illness reported above demonstrates the value of performing routine blood tests for syphilis in dermatological practice. If a blood test had not been done this case would not have been diagnosed in the infectious stage; careful re-examination failed to reveal a chancre, which had probably originally been in his rectum. The resurgence of venereal diseases should remind physicians that these infections may be masked by coexistence with other diseases.

Summary

A case is described in which an adult presenting with chickenpox shortly afterwards developed signs of secondary syphilis, which might well have escaped detection had not screening tests for syphilis been performed on a routine basis in the skin clinic attended by the patient.

References