

Syphilis d'emblée due to blood transfusion

Case report

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SUMMARY A 58-year-old Chinese woman presented with syphilis d'emblée. Seven weeks after a blood transfusion lesions appeared on the palms of her hands and the soles of her feet. These gradually increased in number and other lesions developed on the scalp and palatal mucosa. One of the blood donors was found to have had positive serological test results for syphilis but no clinical symptoms or signs. This case illustrates the danger inherent in the use of whole fresh blood for transfusion purposes.

Introduction

Syphilis d'emblée, or syphilis without a chancre, is a well recognised entity. It occurs as the consequence of direct inoculation of *Treponema pallidum* into the bloodstream, as, for example, in congenital syphilis.¹ Cases of puncture inoculations with infected syringes and tattooer's needles have also been reported.^{2,3} Blood transfusion has occasionally been responsible for the transmission of the disease.¹⁻³ These days the condition is very rare.

Case report

A 58-year-old Chinese married housewife consulted her doctor because of severe anaemia (Hb = 5.6 g/100 ml). She was admitted to hospital in November 1979 and a blood transfusion was given. Seven weeks later, in January 1980, she first noticed macular lesions on the palms of her hands, together with slight fever, headache, anorexia, and arthralgia. She was referred to one of us (AS).

CLINICAL FEATURES

On examination the patient's general condition was good. Her palms and soles showed discrete macular brownish-red lesions 0.5-1 cm in diameter, some of which had white scales at the border. A few moist papular lesions were scattered on the scalp and a mucous patch was present on the hard palatal mucosa. There was no rash on the chest, abdomen,

back, or anogenital region. The retroauricular, cervical, and epitrochlear lymph nodes were enlarged, discrete, firm, non-tender, and fully mobile. The inguinal lymph nodes were not palpable.

LABORATORY FINDINGS

The patient was slightly anaemic (Hb = 11 g/100 ml) and had a raised erythrocyte sedimentation rate (Westergren) (33 mm/first hour). No other abnormalities were found.

T pallidum was detected in the moist papular lesions of the scalp by darkfield microscopy. The cardiolipin Wassermann reaction was positive and the serum Venereal Disease Research Laboratory (VDRL) test gave a positive result at a titre of 1/32.

BACKGROUND HISTORY

Marital sexual intercourse had last occurred two weeks before admission to hospital. Her husband, a 60-year-old businessman, had never had genital lesions or a rash in the past and denied extramarital sexual contact within the last three years. His cardiolipin Wassermann and VDRL tests both gave negative results.

The patient had received 2 units of fresh whole blood from four different donors, whose serological tests for syphilis all gave negative results but who had not been physically examined. At our request, the four donors were traced and the tests were repeated. One of the donors was then found to have a reactive cardiolipin Wassermann test and a positive VDRL test result at a titre of 1/16. The donor admitted to sexual contact with a prostitute 10 days before donating blood, but he had not noticed any signs or symptoms of early syphilis, neither of which were evident on physical examination.

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TREATMENT AND FOLLOW UP

The patient was treated with benzathine penicillin G 2.4 million units intramuscularly weekly in two doses. Her post-treatment course was uneventful. All the lesions on the scalp, palms, soles, and palatal mucosa healed within 1-2 weeks after the first injection. Two to three weeks later the lymphadenopathy disappeared. Her serum VDRL titre fell to 1/8 after a month and became negative after 12 months.

Comment

The problem of recognising primary syphilis in women differs greatly from that of identifying primary infection in men. This is because genital lesions in women are often inaccessible and therefore not noticed; also, women are often uninquiring and unaccustomed to seeking medical advice.

This case of syphilis d'emblée illustrates the inherent danger of transfusion with fresh whole

blood. Although routine serological tests of donors without clinical examination would detect those in the late primary, secondary, and latent stages of syphilis, they would not exclude those with seronegative primary syphilis or those incubating the disease. Thus, the only safe use of infected blood for transfusion purposes is after storage at 5°C for not less than four days, during which the organisms are presumed to disintegrate.²

References

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