Imported pedal chancroid: case report

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SUMMARY A man aged 22 who had returned from the Fiji Islands to Denmark had chancroid on the left foot, but no history or sign of primary genital infection. The pedal location only is an unusual presentation of the disease, which was diagnosed only microbiologically. Chronic tropical ulcers therefore demand special microbiological attention.

Chancroid is mainly transmitted sexually, and lesions are usually found on the genitals and in the perianal region. Some patients have multiple lesions because of autoinoculation. Extragenital chancroid has been found on the finger, lip, breast, and tongue. To emphasise the clinical variety we report on a patient with culture proved chancroid located on the foot and with no sign of genital infection.

Case report

A heterosexual man aged 22 who had previously been healthy was admitted to hospital in June 1987 with jaundice. He had had an ulcer below the left medial malleolus for four weeks despite having received treatment with pivampicillin for 10 days (fig). Three weeks previously he had returned to Denmark after a journey to Australia, the Fiji Islands, and Canada. The wound started as a cut on a stone or a mussel shell while swimming near the Fiji Islands. During his travelling he had had sexual intercourse with three Western women, who were not prostitutes. He denied having had anogenital ulcers or other symptoms of sexually transmitted disease.

A sharply circumscribed tender superficial pedal ulcer without induration, measuring 2 cm in diameter, was seen on examination. No anogenital ulcer or scar and no inguinal lymphadenopathy could be found.

Serological tests showed antibodies of the IgM class...
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to hepatitis A virus (HAV). No antibodies against Treponema pallidum, gonococci, chlamydiae, or the human immunodeficiency virus were detected.

Pure growth of multiple colonies of organisms like Haemophilus spp were initially obtained on chocolate agar supplemented with cysteine and vitamin K, which had been incubated for 48 hours in an anaerobic chamber. Subculture on chocolate agar in an atmosphere of 5% carbon dioxide in air and high humidity showed small greyish colonies with a few interspersed larger colonies. They could be pushed intact across the surface of the medium. Slight satellite growth was seen around a streak of Staphylococcus spp on 5% horse blood agar. Gram staining showed small cocccobacillary Gram negative rods occasionally arranged in long parallel rows.

Biochemically the isolate was inert. Nitrate was reduced, but tests for the following gave negative results: oxidase, catalase, porphyrin, indole, urease, ornithine, β-galactosidase, and fermentation of carbohydrates. The methods described by Kilian were used.2 The organism was identified as Haemophilus ducreyi, and the diagnosis was confirmed by the department of diagnostic bacteriology, Statens Seruminstitut, Copenhagen.

The isolate was susceptible to erythromycin and the combination of sulphonamide and trimethoprim, and was moderately susceptible to sulphonamide and penicillin. It did not produce β-lactamase.

The hepatitis A resolved after three weeks of restricted physical activity. We soaked the wound three times a day and administered sulphamethizole 2 g twice a day for 14 days. The wound healed with complete epithelialisation in two weeks and left a scar with a slightly rough surface.

Discussion

The location of the chancroid of our patient was unusual. The wound was therefore not primarily thought to be chancroid, a disease with a low incidence in Denmark (two per million a year) apart from a local epidemic on Greenland.3 Furthermore, as our patient claimed that his ulcer had been caused by a non-sexual trauma and as he had no genital symptoms on admission, the correct diagnosis of his wound might have remained obscure without the microbiological investigations.

The disease is generally transmitted sexually, but accidental inoculation of medical and paramedical staff has been reported. Occupational transmission was ruled out for our patient. According to his history, the ulcer might have resulted from inoculation of the wound. No culture from his genitals was undertaken, so it was not possible to assess whether the pedal chancroid was a primary lesion caused by inoculation from another H ducreyi carrier or a secondary lesion caused by autoinoculation from an asymptomatic lesion on the patient himself.

He had a good clinical response to sulphamethizole, and we therefore continued the treatment as planned when moderate susceptibility (or sensitivity) was later found in vitro. A similar discrepancy between resistance in vitro and a good clinical response to sulphonamide has been reported previously.4 Furthermore, the wound had not responded to treatment with pivampicillin, despite in vitro susceptibility of the isolate to that antimicrobial.

Our case shows the importance of medical and microbiological services collaborating adequately. When submitting specimens for microbiological investigations from patients who have been abroad, clinicians should give the relevant geographical information.

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References