Syphilitic Aortitis in Secondary Syphilis

Syphilis is a mainly sexually transmitted infection that may show a variety of symptoms at various stages. Syphilitic aortitis is a known complication of tertiary syphilis and can cause aneurysm of the aorta. In the era of antibiotics, cardiovascular syphilis has become very rare. Nevertheless it can cause life-threatening or even fatal symptoms and should therefore be diagnosed at an early stage.

REPORT OF A CASE

A man in his 70s presented with a 4-week history of an asymptomatic eruption, bilateral lymphadenopathy, and slightly reduced general condition. Physical examination revealed generalized dark purple scaly plaques and nodules (Figure 1) involving soles and palms.

Routine laboratory tests showed elevated C-reactive protein and liver enzyme levels. Hematoxylin-eosin staining of a tissue specimen demonstrated an inflammatory infiltrate with some plasma cells. Immunohistochemical findings were positive for Treponema pallidum. Serologic results were negative for human immunodeficiency virus and hepatitis. The results for the VDRL (Venereal Disease Research Laboratory test) (1:128), TPPA (Treponema pallidum particle agglutination assay) (1:10240), and FTA-Abs (fluorescent treponemal antibody-absorption) IgG test were positive, and the level of 19S IgM FTA-Abs was marginally elevated, confirming the diagnosis of syphilis. Ocular and neurologic involvement was excluded. A chest radiograph showed an enlarged aortic contour suggestive of dilative aortic angiopathy without any signs of aneurysm. Radiographic computed tomography (CT) demonstrated thickening of the aortic wall and aortic sclerosis in the transverse plane. 18F-Fluorodeoxyglucose (18F-FDG) positron emission tomography (PET) alongside CT (PET/CT) demonstrated a maximum isotope uptake of the descending aorta, confirming the suspected diagnosis of an aortitis (Figure 2). We thus diagnosed secondary syphilis with asymptomatic aortitis. To prevent aortic rupture triggered by massive cell disintegration of T pallidum microorganisms (Herxheimer reaction), we implemented a prophylaxis with 100-mg prednisolone prior to the antibiotic therapy with penicillin G, 6 × 5 Mio IU/d, over a 2-week period.

DISCUSSION

Syphilitic aortitis is a potential serious complication of usually chronic tertiary syphilis. It is exceedingly rare in secondary syphilis, as seen in our patient. It often is an incidental radiologic finding, and signs of infection (eg, fever and leukocytosis) are often missing. Performing 18F-FDG-
PET/CT scan may allow the early diagnosis of syphilitic aortitis at a subclinical stage and prevent life-threatening or fatal outcome.\(^5,6\)

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**Hydraulic Expulsion of Tumbu Fly Larvae**

Furuncular myiasis is rarely observed outside of endemic areas, which may hamper accurate diagnosis. Herein we report 2 cases of *Cordylobia anthropophaga* larval removal using a hydraulic expulsion technique.

**Report of Cases**  
**Case 1.** A woman in her 30s presented to the dermatologist with a 3-week history of a painful nodule on her right inner thigh. She had recently returned from travel in Uganda, where she had hand washed her clothing and hung them to dry. She reported that the nodule first appeared during her trip as a small papule that increased in size over time and became painful. After her return to the United States, 2 weeks after the nodule's initial appearance, the patient developed a fever and went to a local emergency department, where she was noted to be febrile and tachycardic with a fluctuant nodule and significant surrounding erythema. Findings of blood smears were negative for malaria, and blood culture findings were also negative. The patient was diagnosed as having an abscess with surrounding cellulitis and prescribed oral doxycycline. She was seen in follow-up for the next 3 days with resolution of fever.

Despite this, the nodule persisted and became increasingly more painful. Three weeks after its initial appearance, the patient reported feeling and seeing movement within the nodule. Physical examination revealed a 1.5-cm nodule with minimal erythema and a central operculum, through which a larval body could be identified (Figure 1).

**Case 2.** A man in his 30s presented to the dermatologist with 2 nodules on his back similar to that seen on patient 1. The man had also recently traveled to Uganda. He denied any pain or sensation of movement. On examination, both 1-cm nodules were found to have visible larvae within.

**Clinical Resolution of Cases 1 and 2.** In preparation for extraction of the larvae, we performed local infiltration of lidocaine, 1%, with 1:100,000 epinephrine at the base of the nodules in both patients. The larva from patient 1 and one of the larvae present on patient 2 were expelled by hydraulic pressure alone (Video). The second larva from patient 2 was pushed to the operculum following infiltration and was painlessly extracted with forceps. The larvae were collected for microscopic examination and morphologically identified as second-stage larvae of the African tumbu fly, *C. anthropophaga* (Figure 2). All 3 nodules healed without complication.

**Discussion**  
Cutaneous furuncular myiasis results from skin invasion by fly larvae of the order Diptera, including the tumbu fly, *C. anthropophaga*. Furuncular myiasis is rarely observed outside of endemic areas, which may hamper accurate diagnosis. The tumbu fly is endemic to sub-Saharan Africa and can be identified as a large, brownish-yellow fly with black abdominal spots and brown wings.\(^7\) The adult female fly can lay up to 300 eggs on ground or on wet clothing. The larvae hatch about 2 to 4 days after deposition and can remain dormant for 7 to 20 days until contact with skin occurs, allowing the larvae to burrow into the subdermal layer.\(^2\) Pain and itching can

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**Figure 1. Case 1 Skin Lesion at Presentation**

A 1.5-cm nodule on presentation with visible larval body in central operculum.