

# A case of syphilis followed as alopecia areata

## Alopesi areata olarak izlenen bir sifiliz olgusu

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Dear editor,

A 33-year-old male patient presented with the complaints of a gray-white plaque lesion on the distal end of the tongue (Fig. 1a) and lower surface which started 2-3 days ago. In addition, there were multiple linearly arranged patchy alopecia areas on the left side of the beard area (Fig. 1b), and he was followed up with the diagnosis of alopecia areata in the outer center. In genital examination, on the dorsolateral side of the penis, a painless, crusted, ulcerated lesion (Fig. 1c), which was noticed before the beard loss and is now healing, was observed. There was a history of painless lymphadenopathy, myalgia, and arthralgia in the cervical and inguinal region. He had a history of suspicious sexual intercourse. He had no known additional disease. The patient was thought to be in the secondary syphilis stage with the presence of syphilitic alopecia and plaque mucous, which started after genital ulcer. Treponema pallidum Haemagglutination Test (TPHA) and venereal disease research laboratory (VDRL) were positive in the patient who was examined for sexually transmitted diseases. A single dose of intramuscular Penicillin G benzathine, 2.4 million U, was planned.

Syphilis, caused by Treponema pallidum, is the oldest known sexually transmitted disease.<sup>1</sup> There is an incubation period of 20-90 days after infection.<sup>2</sup> Syphilis is known as the “great imitator” because of a wide variety of symptoms and these differences in the time it takes for the lesions to appear.<sup>1</sup> Primary syphilis is characterized by a mouthless solitary chancre. It is classically located in the genital area. If this self-resolving lesion is not treated, secondary syphilis develops with hematogenous spread. At this stage, many mucocutaneous skin lesions such as condyloma latae, hand and foot lesions, macular rash, alopecia may be accompanied by various symptoms such as diffuse lymphadenopathy, headache, myalgia, arthralgia, pharyngitis, hepatosplenomegaly, and fatigue.<sup>2</sup> In secondary syphilis, slightly elevated and white or grayish plaques are most frequently encountered in the oral mucosa.<sup>3</sup> Alopecia is a rare manifestation of syphilis. It is thought to be between 2.9 and 7%.<sup>4</sup> It is most commonly encountered as a patchy “Moth-eaten” pattern, and this pattern is considered pathognomonic for secondary syphilis.<sup>5</sup> If the diagnosis is not made and treatment is not given in the secondary syphilis

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**Fig. 1.** Gray-white plaque lesion on the tongue (1a), Linearly arranged patchy alopecia areas (1b), Crusted ulcerated lesion (1c)

stage, which can also regress spontaneously, the latent phase is entered. Some patients at this stage develop tertiary syphilis, characterized by cardiovascular syphilis, neurosyphilis, and late benign syphilis.<sup>2</sup>

Immunological tests (treponemal and non-treponemal) are used for diagnostic and follow-up purposes in clinical practice. Treponemal tests such as TPHA detect antigen-specific antibodies that continue to respond throughout life regardless of treatment. Non-treponemal tests detect non-specific antibodies such as cardiolipin antibody detected in VDRL. They are semi-quantitative tests. Titration is determined and followed.<sup>6</sup>

As the first step in treatment; in primary, secondary, or early latent syphilis, intramuscular penicillin G benzathine is administered as a single dose of 2.4 million units; it is done once a week for three consecutive weeks in late latent syphilis and tertiary syphilis.<sup>2</sup>

Early diagnosis and treatment are very important to reduce transmission. Untreated disease can last for decades.<sup>1</sup> Syphilis, which is a great imitator, should always be kept in mind as a differential diagnosis in daily practice. Our patient first applied to the doctor with the complaint of alopecia. He also had an old genital lesion at that time, but the patient did not express this complaint. When questioned later, he said to have had a genital lesion when he came for an oral mucosal lesion. Therefore, our threshold for suspecting syphilis and looking for serology should be low. Suspicious sexual intercourse should be questioned in patients and oral-genital mucosa examination should be performed.

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