A giant tongue ulcer: don't miss the treatable cause!

Sirs,

A 73-year-old woman without any chronic disease was admitted to our rheumatology clinic because of a large tongue ulcer, fatigue, hemi cranial headache, and increased acute phase reactants for the last 8 weeks. The malignancy workup consisted of upper and lower gastrointestinal endoscopy, gynecologic examination and smear test, chest x-ray, and mammography performed before admission to our hospital, and it was negative. The tongue ulcer occurred 6 weeks before her admission, and she received intravenous antibiotics with a diagnosis of infected traumatic ulcerative granuloma for 3 weeks due to the positive tissue culture for pseudomonas aeruginosa (Fig. 1). A punch biopsy revealed non-specific findings with mixed inflammatory cell infiltration.

In her physical examination, she had a large healed atrophic ulcer on her tongue with a diameter of 3x2 cm (Fig. 2) and conjunctival pallor. Other physical findings were unremarkable except bilateral murmur over both carotid arteries. She had no tender or tortious temporal arteries, scalp hypersensitivity, or significant systolic artery pressure difference between extremities.

In the laboratory evaluation, haemoglobin was 9.8 g/dL, the erythrocyte sedimentation rate was 80 mm/hour, and C-reactive protein was 32 mg/L. Her liver and renal function tests were within normal limits. Her cranial magnetic resonance imaging (MRI) and temporal artery Doppler ultrasonography were unremarkable. However, there were calcific plaques in both carotid arteries, causing 50% stenosis without increased intima-media thickness. She denied having a temporal artery biopsy. The positron emission tomography-computed tomo-graphy (PET-CT) revealed diffuse vascular FDG accumulation compatible with systemic vasculitis (Fig. 3).

We started prednisolone 1mg/day (with a tapering protocol) and tocilizumab 162 mg/week (s.c.) with a diagnosis of giant cell arteritis. However, due to a severe allergic reaction, tocilizumab treatment was terminated after 2 weeks, and methotrexate 15mg/week was added as an immunosuppressive treatment. After 6 months of treatment, she had no new symptoms related to vasculitis, and her acute phase reactant levels were within normal limits.

Tongue ulcers or ischaemia in the elderly can be the initial symptom of GCA(1). However, the diagnosis may be challenging without typical clinical findings such as temporal artery tenderness and decreased pulse or imaging findings, including temporal artery Doppler US or MRI angiography-proven intimal thickness and/or occlusive arteriopathy. PET-CT is an increasingly used imaging tool with added diagnostic value when the conventional imaging tools and temporal artery biopsy are not diagnostic or unavailable, as in our patient (2). Even with the help of imaging, the differential

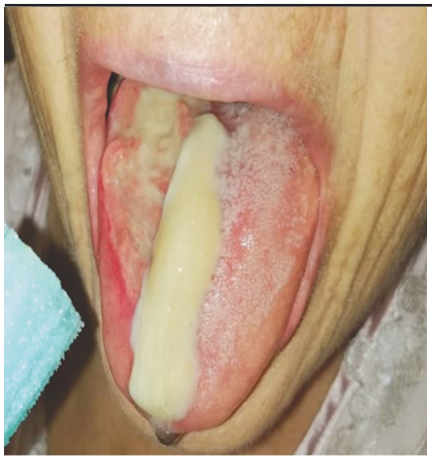

Fig. 1. Infected tongue ulcer before antibiotic treatment.

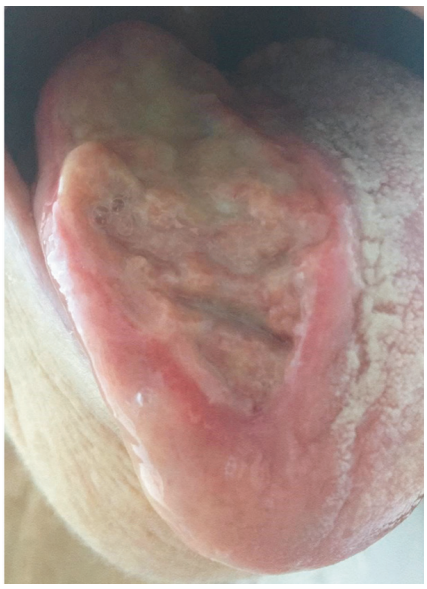

Fig. 2. Atrophic-healed tongue ulcer at the time of admission.

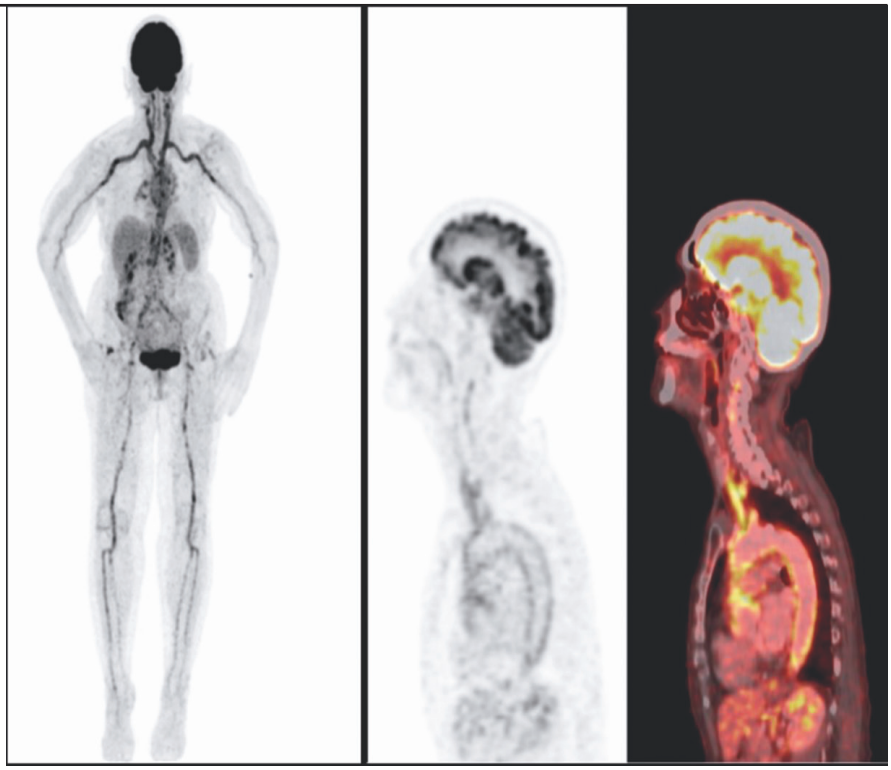

Fig. 3. PET-CT image of the patient.
PET-CT: positron emission tomography-computed tomography.

diagnosis between GCA and atherosclerosis can be challenging. Other possible reasons for tongue ulcers, including malignancy, infection, and sympathomimetic agents, atheroembolism, should always be considered (1). Tuberculosis, syphilis, deep fungal infections, Epstein-Barr virus, cytomegaly virus, or human immunodeficiency virus may cause tongue ulcerations (3-6). Infections are not only the reason for tongue ulcers but also may be the complicating factor in benign or malignant ulcers, as in our case. Thus, histopathological and microbiological assessments are critical in the diagnosis.

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