An 86-year-old man presented with double vision and bitemporal ulcerative secreting skin lesions that had developed over the preceding 3 weeks (Figure A). His medical history included a 3-month episode of new headache and jaw claudication, and a common cardiovascular risk profile (cerebral ischemic stroke 10 years previously, hypertension, atrial fibrillation, and vascular surgery involving the aorta and right carotid artery), as well. The patient denied experiencing fever or weight loss; his drug regimen included antihypertensive, anticoagulant (phenprocoumon), and topical corticosteroid agents. Clinical examination revealed mild anisocoria and palpable STA, and histological proof of vasculitis. Recently, high-resolution color duplex ultrasonography has been proposed as an alternative to temporal artery biopsy, because the appearance of the halo sign, a hypoechogenic signal indicating a thickened vessel wall, has a high predictive value for vessel wall infiltration.

This case illustrates an unusual presentation of TA with the following characteristics: (1) necrotic skin lesions; (2) double vision instead of loss of vision; (3) prolonged course of the disease; (4) concurrent echogenic intimal and hypoechogenic perivascular appearance on high-resolution color duplex ultrasonography; and (5) only mild elevation of the ESR.

Fewer than 100 cases of TA with bitemporal affliction of the scalp have been reported to date. This specific disorder consists of vasculitic occlusion of supplying small arteries and insufficient collateral routes, leading to deficient circulation and necrosis. The mean time from initial symptoms to beginning scalp necrosis is 2.9 months, whereas the mean time to diagnosis is 4.0 months. Interestingly, elevated ESR—a primary criterion for TA—is not always found in cases of TA with scalp necrosis. The fact that the ESR in this case was only mildly elevated may indicate the prolonged course of the disease before diagnosis. This may be supported by the high reflectivity of the STA vessel wall often observed with chronic inflammation. Another aspect of the disorder is that preexisting antiplatelet or anticoagulatory therapies, such as in this case, seem to prevent or attenuate major ischemic complications such as amaurosis or stroke. Double vision attributable to eye muscle paresis is a rare symptom of TA and may be observed in vasculitic ischemia of the eye muscles.

Unusual symptoms of the neck, head, and brain possibly related to ischemia with only mild ESR elevation in elderly patients should prompt investigation for TA including high-resolution color ultrasonography of the STA.

Disclosures

None.

From the Department of Neurology, University of Regensburg and Bezirksklinikum, Regensburg, Germany (L.K., F.S.); Vascular and Endovascular Surgery, University Hospital Regensburg, Germany (K.P.); Ophthalmology, Regensburg-Lappersdorf, Germany (S.B.); and Department of Neuropathology, University Hospital Regensburg, Germany (S.Z.).

Correspondence to Lukas Kremmler, MD, Department of Neurology, University of Regensburg, Bezirksklinikum Regensburg, Universitaetsstrasse 84, 93053 Regensburg, Germany. E-mail lukas.kremmler@medbo.de

Circulation is available at http://circ.ahajournals.org

DOI: 10.1161/CIRCULATIONAHA.114.009703
References


Figure. A. Necrotic skin lesion on the right temporal scalp at treatment initiation. B and C. High-resolution color duplex sonograms of the STA showing hypoechogenic periluminal halo signs (*) and echogenic intimal layers (arrows). D and E. Photomicrographs showing a vascular lumen that is narrowed owing to the proliferation of intima cells and intima fibrosis (D) and intima proliferation and severe transmural granulomatous inflammation (E). STA indicates superficial temporal artery.
High-Resolution Color-Coded Ultrasonography Findings of Subacute Temporal Arteritis With Ulcerating Skin Lesions
Lukas Kremmler, Karin Pfister, Sabine Bogdahn, Saida Zoubaa and Felix Schlachetzki

_Circulation_. 2014;130:348-349
doi: 10.1161/CIRCULATIONAHA.114.009703
_Circulation_ is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2014 American Heart Association, Inc. All rights reserved.
Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/content/130/4/348

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in _Circulation_ can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at: http://www.lww.com/reprints

Subscriptions: Information about subscribing to _Circulation_ is online at: http://circ.ahajournals.org//subscriptions/