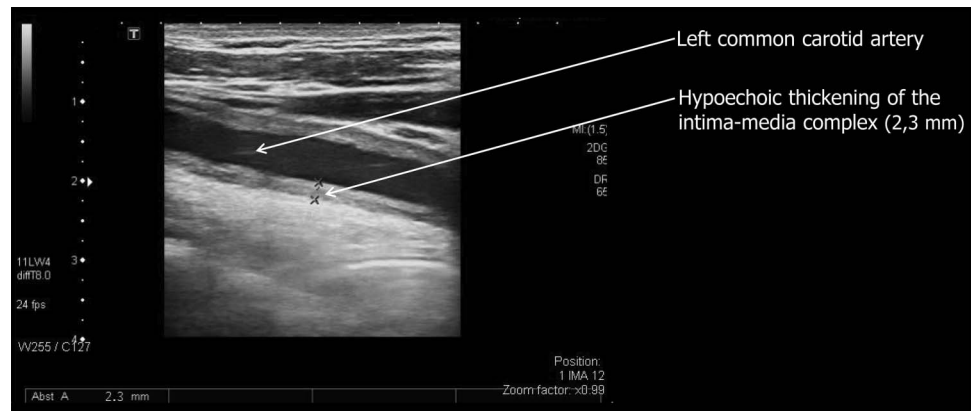


Teaching NeuroImages: Macaroni sign

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Figure Duplex ultrasonography of the left common carotid artery



Duplex ultrasonography shows thickening of the intima-media complex that results from granulomatous inflammatory changes of the medium- and large-sized arteries mediated by invasion of giant cells and mononuclear cells. The macaroni sign therefore suggests active arterial vessel inflammation.

A 35-year-old patient with previously diagnosed and currently untreated Takayasu arteritis presented with motor aphasia. The symptom had started 24 hours before presentation and ceased after another 12 hours. Cranial MRI and magnetic resonance angiography were normal. Plasma concentration of C-reactive protein was elevated (9.1 mg/dL). Duplex ultrasonography showed hypoechoic, homogeneous thickening of the intima-media complex of the left common carotid artery (figure). This finding, also referred to as “macaroni sign,” has been reported in Takayasu arteritis.^{1,2} The patient was transferred to the rheumatologic department and treatment with prednisolone (80 mg/day orally) and acetylsalicylic acid (100 mg/day orally) was initiated.

AUTHOR CONTRIBUTIONS

Dr. Siepmann made substantial contributions to performance and analysis of the ultrasonographic assessment reported in this article as well as

treatment of the patient and drafting the manuscript. Dr. Bodechtel made substantial contributions to supervision of diagnostic testing analyses and treatment as well as critical revision of the article for intellectual content.

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