

MRI with Contrast Agent Showing Arterial Wall Inflammation in Giant Cell Arteritis

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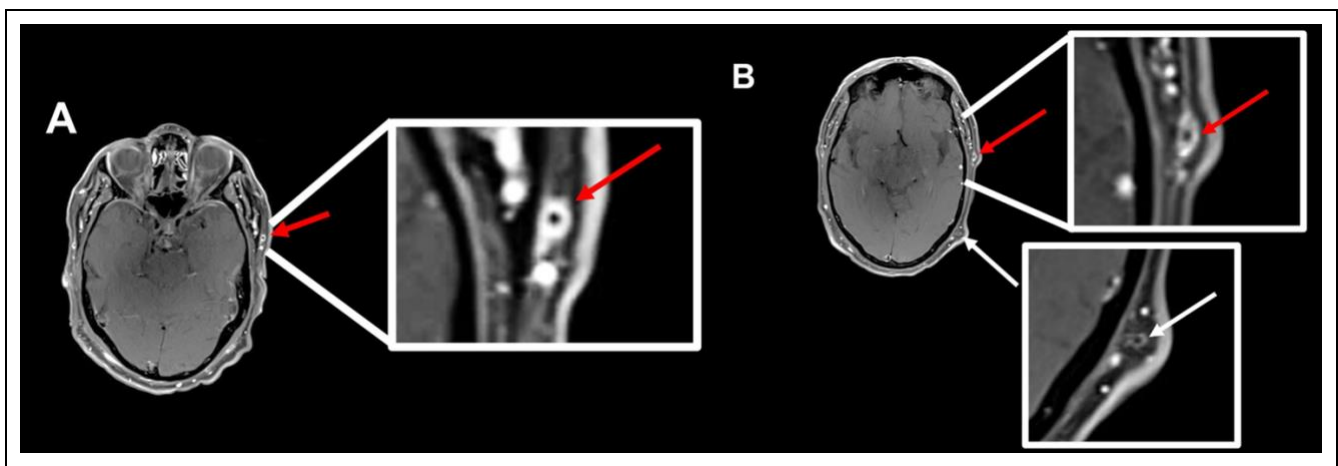
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Clinical Image

Capture: T1-weighted images with fat saturation on 3Tesla brain Magnetic Resonance Imaging (MRI), of an 81-year-old man, who was referred to us with the suspicion of migraine with visual aura. He already had work up for giant cell arteritis (GCA), including MRI without contrast and ultrasound, which were negative. Initial symptoms were horizontal diplopia and episodes of visual abnormalities.

In our examination, six weeks after symptom onset, we found palpable temporal arteries (TA), but allodynia of the sculp in the frontotemporal regions, more on the right. CRP and ESR were mildly increased.

A second brain MRI with contrast agent, showed signs of wall inflammation of the TA (Figure). In A, the walls of both superficial TA are depicted thickened, with abnormal contrast agent uptake (red arrows). In B, the abnormalities (wall thickening, contrast uptake) of the left TA (red arrow) are shown, compared to the walls of a normal artery (white arrow).

With now strong suspicion of GCA, treatment with intravenous corticosteroids was started, due to episodes of amaurosis fugax. A second ultrasound showed a positive compression sign and typical signs of vasculitis, while arterial biopsy confirmed the diagnosis.

Although traditionally ultrasound of the TA is used, T1-weighted brain MRI with contrast agent may also be useful in the diagnosis of TA [1,2]. Since brain MRI is a broadly used examination that may be ordered first, in case of headache or visual symptoms in elderly patients, we propose to always include contrast agent and evaluation of the superficial cranial arteries, if GCA seems possible.

REFERENCES

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