Large vessel vasculitis

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Giant cell arteritis

Case of a 74-year-old woman with giant cell arteritis presenting with only systemic manifestations (high fever > 38.5°C, anorexia with weight loss of 4 kg in 3 months and asthenia). ESR was 104 mm/h.

![Image of biopsy specimen](image1)

**Fig. 1.** Biopsy specimen of temporal artery stained with hematoxylin and eosin, x 100. Present is a dense transmural inflammatory infiltrate with scattered giant cells.

Duplex ultrasonography in giant cell arteritis

Three different studies have reported that ultrasonographic evidence of a dark halo around the lumen of temporal arteries had good specificity, but lower sensitivity for diagnosing GCA (Table). In other words, the presence of a halo rules in a diagnosis of giant cell arteritis (GCA), although its absence does not exclude this diagnosis.

**Table 1.** Sensitivity and specificity of ultrasonographic evidence of a halo around temporal arteries for the diagnosis of giant cell arteritis.

<table>
<thead>
<tr>
<th>Study (ref.), year</th>
<th>Biopsy-proven giant cell arteritis</th>
<th>Sensitivity</th>
<th>Specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schmidt et al. (1), 1997</td>
<td>76%</td>
<td>92%</td>
<td></td>
</tr>
<tr>
<td>Salvarani et al. (2), 2002</td>
<td>40%*</td>
<td>93%*</td>
<td></td>
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<tr>
<td>Schmid et al. (3), 2002</td>
<td>50%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

*Halo > 1 mm in thickness

**Fig. 1.** Patient with temporal arteritis: A colour Doppler longitudinal scan shows hypoechoic (black) areas around the proximal superficial temporal artery (indicated by crosses).

**Fig. 2.** Patient without temporal arteritis: A color Doppler longitudinal scan shows normal proximal superficial temporal artery.

**Fig. 2.** 18F-FDG-PET image. Increased FDG intake in the thoracic aorta, and both subclavian and axillary arteries.

References

Primary systemic amyloidosis presenting as giant cell arteritis

Case of a 73-year-old man with anorexia, weight loss, and claudication of the jaw, arms and legs. Physical examination revealed bruits over the arms. Serum immunoelectrophoresis showed a monoclonal IgG $\lambda$ protein. Aortogram demonstrated changes consistent with arteritis of the aortic arch vessels. ESR 82 mm/1st hr.

Takayasu's arteritis

Case of a 32-year-old woman with Takayasu's arteritis presenting only with systemic manifestations (high fever > 38.5º C, anorexia and asthenia). Thoracic and abdominal angiography were negative. ESR was 96 mm/hr.

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**Fig. 1.** Temporal artery biopsy specimens. Hematoxylin and eosin-stained section showing absence of inflammation.

**Fig. 1.** Aortic arch abdominal colour Doppler sonography. Presence of a thickening of the left common carotid artery walls with a surrounding circumferential hypoechoic halo of 4 mm at transversal scan (indicated by crosses). The halo is probably due to an edema of the artery wall related to inflammation.

**Fig. 2.** Contrast-enhanced CT scan. Presence of circumferential wall thickening of 3.5 mm of the left common carotid artery (indicated by a cross).

**Fig. 2.** Temporal artery biopsy specimens. Congo red-stained section under polarized light showing amyloid deposits.