

Geniculate quadruple sectoranopia

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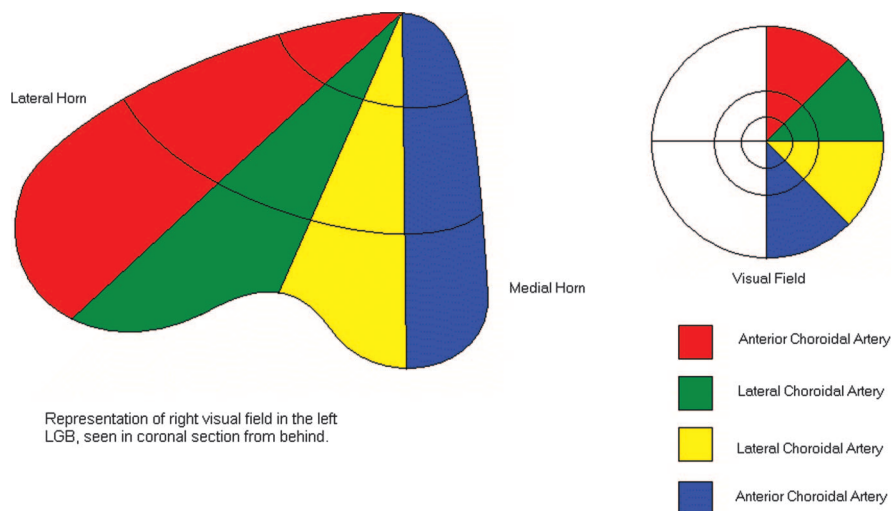


Figure 1. Anatomy of blood supply to lateral geniculate body.

Quadruple sectoranopias are wedge-shaped visual field defects that can be caused by lesions in the medial and lateral portions of the lateral geniculate body.¹ By definition, there is involvement of two homonymous segments of each hemifield. The etiology is typically an occlusion of the anterior choroidal artery. Its counterpart, the horizontal sectoranopia, is produced by lesions of the geniculate hilum,

an area supplied by the lateral choroidal artery (figure 1).

A 24-year-old man developed acute onset of blurred vision and headache. Examination revealed an isolated left homonymous hemianopia.

Brain MRI demonstrated acute intraparenchymal hemorrhage including the right lateral geniculate body (figure 2). Magnetic resonance angiography and cerebral angiogram showed abnormal

vessels in the right ambient cistern, suggestive of an arteriovenous malformation.

Humphrey 30-2 visual fields showed a left homonymous quadruple sectoranopia (figure 3).

Reference

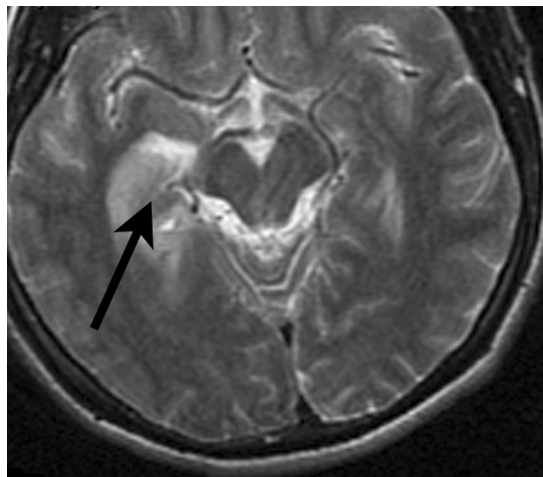
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Figure 2. T2 axial MRI demonstrating high signal abnormality involving the right lateral geniculate nucleus.



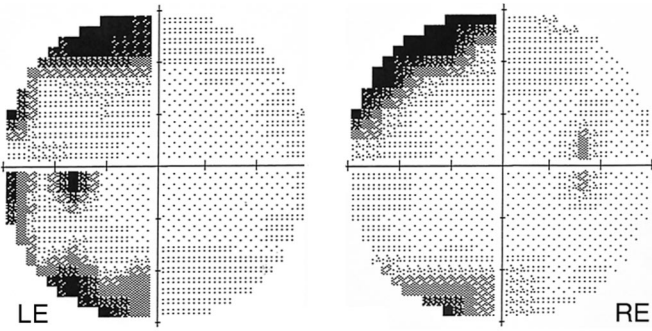


Figure 3. Humphrey visual field demonstrating left quadruple sectoranopia.

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