

## Visual Field Defects - Left Hemianopia with Macular Sparing

Left hemianopia with macular sparing is a partial loss of vision in the same half of both eyes with the center, the macula, spared. A lesion of both the dorsal radiation and Meyer's loop in the occipital lobe causes this blindness. The lesion can be due to a posterior cerebral artery infarct causes ischemia of the visual cortex. Dual supply to the region associated with macular sight, supplied by the PCA and middle cerebral artery, explains the sparing of the macula.



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### Visual Field Abnormality

#### Left Hemianopia with Macular Sparing

[Left Half-nope-eyes with Macula-Dracula](#)

This is a partial loss of vision in both eyes in which the center vision is normal or spared.

#### Vision Loss - Same Side in Both Eyes

[Left Side Darkened in Both Eyes](#)

Almost half of the visual field is lost, and it is the same half in both eyes.

#### Center Spared

[Center of Macula-Dracula Spared with a Spare-tire](#)

A small circular area in the center of the eye, the macula, is spared from vision loss due to its bitemporal projection to the occiput.

### Location of Lesion

#### Occipital Lobe

[Octopus](#)

Both the dorsal optic radiation and Meyer's loop are lesioned in the occipital lobe. The occipital lobe is the most posterior portion of the head and are considered the visual processing center of the brain.

### Causes

#### Posterior Cerebral Artery (PCA) Infarct

[Post Brain Artery clogged with PCA](#)

There is dual blood supply from the posterior cerebral artery and middle cerebral artery to the area of the visual cortex associated with macular sight. When there is an infarct of the PCA, the visual cortex becomes ischemic and loses function, except for the region supplying the macula, which remains nourished by the MCA.