Visual Field Defects - Bitemporal Hemianopia

Bitemporal Hemianopia is a partial blindness affecting the outer halves of both eyes. This loss visual field gives way to tunnel vision. A lesion of the optic chiasm, where the optic nerves from both eyes cross, causes this partial vision loss. Suprasellar compression due to a pituitary adenoma or craniopharyngioma leads to compression of the optic chiasm. An infarct of the anterior communicating artery which supplies the optic chiasm would lead to ischemia causing the visual deficit. Also a berry aneurysm of the ACA can compress the optic chiasm, resulting in tunnel vision.



PLAY PICMONIC

Visual Field Abnormality

Bitemporal Hemianopia
Bi-temple Half-nope-eyes
This is a type of partial blindness affecting half of each eye.

Both Eyes Outside Vision Loss
Both Eyes Darkened on the Outside
Vision is lost in the outer halves of both eyes.

Tunnel Vision
Tunnel View
This damaged sight leads to an inability to see objects on the periphery. Only objects in the center of the field of vision are seen, known as tunnel vision.

Location of Lesion

Optic Chiasm
Eye Crossing
The location of the lesion is at the optic chiasm, the point where the optic nerves from the left and right eye cross.

Causes

Suprasellar Compression
Super-cellar-doors Compressed
This can be caused by a tumor of the pituitary gland. As the tumor enlarges, it compresses the suprasellar region and thus the optic chiasm, which surrounds the pituitary stalk.

Pituitary Adenoma
Pituitary-Pitbull with Add-gnome
This is a primary tumor of the pituitary gland. Those that compress the optic chiasm are usually non-functioning, meaning they do not produce hormones, and are most often benign.

Craniopharyngioma
Crane-pharaoh-gnome
Also known as Rathke’s pouch tumor, this is a neoplasm of the pituitary stalk, derived from the embryonic tissue. It often occurs in children.

Sign up for FREE at picmonic.com