

Visual Disturbances Post-Stroke

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Vision loss



Shifts in perception



Dry eyes



Double vision

Vision Changes After Stroke

- A stroke can affect the parts of the brain that control **vision, eye movement, and visual understanding**.
 - Higher prevalence in strokes affecting the occipital and parietal lobes of the brain.
- **Very Common**
 - A study in the UK reported 84% of stroke patients presented with visual symptoms ([Rowe, 2013](#)). About 16% of the asymptomatic patients had confirmed visual impairments.
- **Problem?**
 - It raises the question of how many stroke survivors with visual impairment may remain undetected where formal vision screening is not undertaken.

Questions



- **How many of you had a vision or eye exam after your stroke?**
 - Did you receive any type of visual screening during your routine follow-up visits or rehab appointments?
- **Who assessed your vision?**
 - Emergency room physicians, Neurologists, Ophthalmologists or neuro-ophthalmologists, Occupational therapy or vision rehab specialists

Vision Changes After Stroke

Visual Field Loss

Eye Movement

Visual Processing

Light Sensitivity

Distorted Vision

Positive Phenomena

Visual Field Loss



- **Homonymous hemianopia:** Missing one side of your vision (left or right).
- **Quadrantanopia:** Missing a quarter of your vision.
- **Blind spots (scotomas):** Small gaps in your sight.

You may bump into objects, miss steps, or have trouble reading.

Occipital and parietal lobe strokes most commonly caused visual field loss.

Source: <https://doi.org/10.1155/2013/719096>

Eye Movement Problems



- **Double vision**
- **Eye misalignment**
- **Trouble tracking moving objects**
- **Unsteady eye movements (nystagmus)**

These issues can make it hard to focus or judge distances.

Source: <https://doi.org/10.1002/brb3.771>

Visual Processing Changes



- **Visual neglect:** Not noticing things on one side (even though your eyes work).
- **Difficulty recognizing faces or objects**
- **Problems with depth perception**
- **Getting disoriented in busy environments**

This happens because the brain is working harder to interpret visual information.

Source: <https://www.stroke.org/en/about-stroke/effects-of-stroke/vision-and-hearing/visual-disturbances>

Distorted Vision



Things may look blurred, fuzzy, wavy, or uneven. Reading may feel tiring or slow.

Light Sensitivity

Bright lights or glare may feel uncomfortable.

Positive Visual Phenomena



Some stroke survivors see things that aren't there or experience visual "distortions," such as:

- **Flashes or sparkles of light**
- **Shimmering zig-zags or patterns (ocular-migraine-like aura)**
- **Bright shapes or moving colors**

These can happen after occipital or thalamic strokes and do NOT always mean a new stroke.

Source: <https://doi.org/10.3390/jcm13185380>

<https://www.frontiersin.org/journals/ophthalmology/articles/10.3389/fopht.2025.1505836/full>