Visual field loss following a stroke or head injury

Information for patients and relatives
Ophthalmology (Orthoptics)
What is visual field loss?

Visual field is a term used to describe the whole of what you see. In other words everything you can see straight ahead and all the way outwards to the peripheral edges of your vision.

Each eye has its own field of vision. The fields of vision of both eyes overlap so some objects are seen by both eyes. Objects to the extreme right or left are only seen by one eye.

Visual field loss is when you have a blind area in your visual field. It may be central and/or peripheral. Visual field loss following stroke or head injury usually affects both eyes.
Usually the part of your vision lost is on the same side as any weakness in your face, arms or legs. Strokes which affect the very back of your brain, the occipital lobe, may cause visual field loss without any other problems.

There are different types of visual field loss. The most common visual field loss following a stroke is a homonymous hemianopia. Hemianopia means loss of half of your vision. In other words the right half or the left half of your vision is missing from each eye.

Other types of visual field loss seen following a stroke or head injury are:

- Loss of quarter of the visual field (quadrantanopia)
- Loss of central vision (low vision)
- Random areas of visual loss (random scotomas)
How can I tell if I have visual field loss?

If you have visual field loss you may:

- notice that you cannot see objects on one side i.e. you have a blind side.
- feel you have lost the vision in one eye only. If you lose your vision to the right you may describe it as having lost the vision in the right eye. Actually you have lost the right side of your vision in the right eye and the right side of your vision in the left eye.
- bump into objects on your blind side.
- easily trip and fall over objects in your blind field.
- find crowded areas more difficult as people and objects suddenly appear in front of you from your blind side.
- suffer difficulties with reading and writing. If you have a left sided field loss it is difficult to find the start of the line. In right-sided field loss, reading may be more difficult because you cannot see ahead along a line of text and you can easily lose your place.

How will visual field loss affect someone following a stroke?

- People with visual field loss may be disorientated and easily alarmed when objects suddenly appear from their blind side.
- They have an increased risk of trips and falls.
- It will affect their general mobility and independence.
- They can lose their confidence about going out, can suffer depression and impaired quality of life.
- If the visual field loss is associated with visual inattention they may have no awareness that their vision is defective (see leaflet on Visual Inattention following Stroke or Head Injury).
- They may have visual hallucinations related to their visual field loss (see leaflet on Charles Bonnet syndrome).
- They will not be able to drive and should notify the DVLA.
Can visual field loss recover and how long will it take?

Recovery depends on the area of the brain affected and how much damage has been done. Some visual field loss can improve by itself. Varying amounts of improvement have been reported in about 50% of patients with visual field loss following stroke. If recovery does occur it is more likely to do so within the first 3-6 months; in some cases there will be no improvement/recovery.

Are there any tests needed to confirm the diagnosis?

Initially your visual field loss is detected by a simple bedside test. This is known as a confrontation visual field test.

More formal testing of your visual field is done on a machine called a perimeter (Octopus). If you have had your eyes tested by an Optician you may already have had one of these tests. It is not painful but does require a bit of patience and concentration.

Can visual field loss be cured?

Visual field loss cannot be cured if it does not spontaneously recover. There are a number of strategies that may be used to allow you to adapt to your visual loss. These aim at improving awareness of the visual field loss.

What does the treatment for visual field loss involve?

Most treatment for visual field loss involves targeted advice for individual patients. None of the treatment options will permanently cure the visual field loss but may help faster adjustment to the loss.

- Visual search strategies help to improve awareness of your blind side and help your ability to scan into the blind field. These include increasing head movements and fast eye scanning movements into the blind area.
• Reading can be helped by using a variety of methods e.g. line guides, typoscopes or magnifiers.
• Prisms (Peli prisms) can be used to temporarily expand your field of vision. They work by displacing images from your blind side onto your seeing side.

Your Orthoptist will discuss with you the best strategies to use and how to go about doing them.

**What can be done at home to help someone with visual field loss?**

A number of things can be done to help people with visual field loss. Some methods make the person more aware of their affected side and attend to it better and others are designed to make the best use of the seeing side.

For example:

• Put important things on their seeing side, eg a cup of tea so they can see it easily.
• Encourage visitors to sit on their affected side.
• Put a line or tape down their affected side of books or newspapers so they know where the line starts / ends.

**Can someone with visual field loss drive?**

If someone has a complete hemianopia or visual field loss that affects their central vision they **cannot** drive.

The DVLA states that you cannot drive with visual field loss, particularly when it involves your central vision.

It is your own responsibility to notify the DVLA of any visual field loss that remains four weeks after your stroke.
Where can I find more information about visual field loss?

If you would like to know more about visual field loss or have any questions or concerns, please contact the Orthoptic Stroke Service at the Royal Hallamshire Hospital on 0114 271 3021.

Additional help and advice is available from:

The Stroke Association

The Stroke Association provides a number of support services across the country to help those affected by stroke. When contacting them please include your postcode so they can direct you to local support where available.

- **The Stroke Association**
  Stroke House
  240 City Road
  London
  EC1V 2PR

The Stroke Association also runs a helpline and an information service:

- **Stroke Helpline and Information Service**
  Stroke Association
  Life After Stroke Centre
  Church Lane
  Bromsgrove
  Worcestershire  B61 8RA

- **0303 303 3100** (Mon-Fri, 9.00am - 5.00pm)
- **info@stroke.org.uk**
- **www.stroke.org.uk**
Sheffield Reablement Service

- Contact: Jane Hammond
- 07717 275705
- jane.hammond@stroke.org.uk

Headway - the brain injury association

- Headway Sheffield
  PO Box 4945
  Sheffield
  S20 9ER

- 0808 800 2244 (Helpline)
- 07849 338380 (Phone)
- helpline@headway.org.uk
- hello@headwaysheffield.co.uk
- www.headway.org.uk
- www.headwaysheffield.org.uk/

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