

Information for Patients

Microvascular Cranial Nerve Palsy

Your doctor thinks that you have suffered a microvascular cranial nerve palsy. This is one of the most common causes of sudden double vision in individuals over 40 years of age. It occurs more often in patients with diabetes and high blood pressure. It will usually get better without the need for treatment.

What is microvascular cranial nerve palsy?

The eyes are moved by 6 muscles. These 6 muscles receive their signals from three cranial nerves: the 3rd cranial nerve (known as the oculomotor), the 4th cranial nerve (known as the trochlear) and the 6th cranial nerve (known as abducens). These nerves begin in the brain stem (at the base of the brain) and enter the eye socket through a fissure (gap) in the bone of the skull behind the eye. Interruption of the blood supply to one of the cranial nerves causes it not to work.

What causes microvascular cranial nerve palsy?

This may occur due to blockage of the small arteries and may be related to high blood pressure or hardening of the arteries and diabetes. Smoking is also one of the known risk factors. The nerves are not permanently injured and over a period of six to twelve weeks their function should recover.

What are the signs and symptoms?

If your eyes aren't moving together you will experience blurred or double vision. This will vary depending on the direction of gaze and which nerve has been affected.

You may experience:-

- Blurred vision that improves when you close one eye.
- Double vision.
- Drooping eyelid.
- Pain in or around your eye. This is related to lack of blood flow to the covering of your brain, (the dura), and often occurs at the start of double vision. This pain should disappear over a few days.

Can anything be done?

It is not possible to speed up the natural recovery of microvascular cranial nerve palsy. It is important to make sure your blood pressure; blood sugar and cholesterol are controlled. Your double vision may be relieved with patching either eye or with prism glasses. This will make you feel more comfortable during the recovery period. This will be done during your consultation.

What if the double vision doesn't go away?

If your double vision doesn't go away on its own it is very important that your eye doctor knows so that they can make sure there is no other cause for your double vision. If your double vision persists and there is no other cause, it is possible to realign your eyes using prisms built into your glasses or glasses with plain lenses in, or with eye muscle surgery. This will be discussed with you further.

When will the pain go away?

The pain associated with microvascular cranial nerve palsies usually disappears within a few days. Over the counter non-steroidal anti-inflammatory medications such as Ibuprofen may be effective in reducing the symptoms. Please check with your eye doctor or GP before taking. If the pain persists you should inform your eye doctor or GP.

Because each patient is different the information contained in this leaflet is a general guide only. Should you require any further information or support please contact the Orthoptic department on (0161) 276 5538 Monday – Friday 9.00 am – 4.00 pm.