How can double vision be treated?

Prisms added to or incorporated into spectacles can realign the images and allow single binocular vision in straight ahead gaze. Because the degree of the misalignment varies in different gaze positions, prism correction does not eliminate double vision in every gaze position. The power of prism can be reduced as the palsy improves. Patching one eye eliminates diplopia, however, this treatment must be carefully monitored in children to avoid the development of amblyopia.

Can sixth nerve palsy be fixed?

After observation for improvement (usually 12 months) surgery may be performed to reduce double vision or to improve the appearance of the eyes.

Are there any other associated signs or symptoms?

Hearing loss, facial weakness, decreased facial sensation or droopy eyelids can be associated with VI nerve palsy depending on the cause.

If you have any of these symptoms please mention them to your Orthoptist.
This leaflet is intended to answer some of the questions of patients or carers of patients, diagnosed with sixth nerve palsy under the care of Western Sussex Hospitals NHS Trust.

**What is sixth (VI) nerve palsy (Also called lateral rectus palsy or abducens nerve palsy)?**
Sixth cranial nerve palsy is weakness of the cranial nerve that innervates (moves) the lateral rectus muscle. The lateral rectus muscle pulls the eye away from the nose and when the lateral rectus muscle is weak, the eye turns inwards toward the nose (esotropia).

Patients with VI nerve palsy are unable to move their eye outwards away from the nose. The degree to which this movement is affected will vary from person to person and be complete (no movement at all) or partial.

**What causes sixth nerve palsy?**
The most common causes of VI cranial nerve palsy are high blood pressure, diabetes, TIA (transient ischemic attack or mini-stroke) or stroke. Other causes may include trauma, viral illness, brain tumour, inflammation, infection, migraine headache and elevated pressure inside the brain.

The condition can be present at birth; however, the most common cause in children is trauma sometimes that which occurs during birth.

In older persons; diabetes, blood vessel disease or a small stroke are the most common causes. Sometimes the cause of the palsy is not determined despite extensive investigation.

**How is it diagnosed?**
The orthoptist will examine the eye movements and position of the eyes taking various measurements. Once VI nerve palsy is diagnosed you may be asked to have blood tests or in some cases a CT or MRI scan.

If the doctor knows you are diabetic, have had a stroke or have other general health risk factors then often no further investigations are necessary, providing the VI nerve palsy shows signs of recovery. Your orthoptist will repeat the measurements at regular intervals to monitor any changes. Should your condition change dramatically in-between appointments you are advised to telephone the Orthoptic department.

**What are the symptoms of sixth nerve palsy?**
Double vision (2 images seen side by side) is the most common symptom. In right VI nerve palsy symptoms will be worse when looking to the right.

There is usually less double vision on near fixation than on distant fixation.

So some patients with VI nerve palsy will not notice any problem when reading but will have double vision when trying to drive.

Children under five typically do not experience persistent double vision, but can develop amblyopia (a lazy eye).

**Does sixth nerve palsy improve with time?**
Yes, in many cases.

The amount of improvement depends upon the cause. Palsy caused by viral illness generally resolves completely; as do those from diabetes or mild blood vessel disease.

Some patients may experience improvement but not complete recovery and may be left a residual muscle weakness. The orthoptist and ophthalmologist can advise you on the long-term management options available to you.

Maximum improvement usually occurs during the first six months after onset, but may occur up to 18 months after the start of symptoms.

Congenital sixth nerve palsy is unlikely to resolve spontaneously.