

Vitreomacular traction

Patient information leaflet

October 2017

Authors: Su-yin Koay, Mostafa Elgohary

What is vitreomacular traction syndrome?

The vitreous is a transparent gel-like structure that lies behind the iris (coloured part of your eye) and lens; and sits in front of the retina (light sensing tissue at the back of the eye).

As we get older, the vitreous gel shrinks and naturally separates itself from the retina. However, every so often, the vitreous gel may remain attached to certain areas of the retina - this most commonly happens at the macula (the area of the retina that is responsible for the detailed central vision). This is known as vitreomacular adhesion.

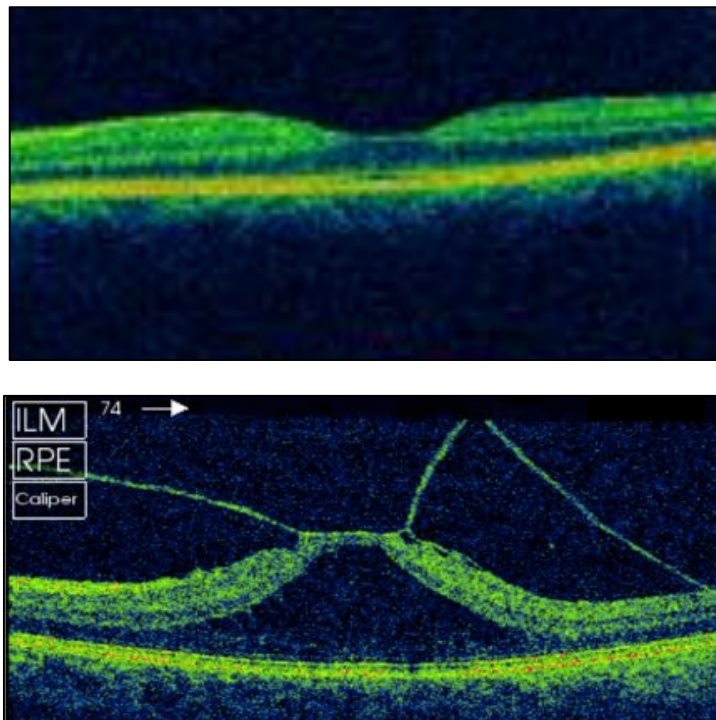
These areas of vitreomacular adhesion can lead to 'pulling' on the macula - this pulling leads to distortion of macula a condition called vitreomacular traction (VMT) syndrome.

How does VMT syndrome affect the vision?

VMT syndrome may cause blurring or distortion of vision (where straight lines look bent). In almost 60% of patients, VMT may continue to pull on the retina and may even cause a macular hole - this will cause further reduction, distortion or even a 'gap' to appear in central vision. This leads to significant difficulty with reading and with seeing with both eyes, sometimes causing double vision and difficulty with judging distances and with driving.

How is VMT syndrome diagnosed?

Your eyes will be dilated with eye drops, which will make your pupils to become large. An examination of the back of the eye and an optical coherence tomography (OCT) scan are then performed. This is non-invasive, and uses light energy to produce detailed images of the back of the eye, which allows your doctor to diagnose VMT syndrome.



OCT scans showing a normal macula (top), and vitreomacular traction (bottom). You can see the edge of the vitreous gel (the line) pulling on the retina, causing a 'tented' appearance.

How is VMT syndrome treated?

In almost a third of patients, VMT syndrome may resolve on its own and therefore no treatment will be necessary. You may not need treatment also if your vision is not affected or if there are signs that the VMT is releasing spontaneously.

If, on the other hand, you continue to have symptoms of blurring distortion or double vision and there are no signs that the VMT is spontaneously releasing, the ophthalmologist may offer you to have an injection or operation to improve the vision and reduce the risk of central visual loss.

1. Injection of ocriplasmin (Jetrea) into the vitreous

Ocriplasmin is a synthetic form of an enzyme (protein) that helps in breaking up the adhesions between the vitreous and the macula. This helps the spontaneous separation of the vitreous gel from the macula. It is only suitable for some cases of VMT syndrome - your ophthalmologist will be able to tell you if this is an option for you based on the findings of your eye examination.

The injection of ocriplasmin is performed in a dedicated treatment room in outpatient or in the operating theatre. You will be given local anaesthetic drops so you will not feel any pain. More information can be found in the 'Intravitreal injections' leaflet.

2. Vitrectomy and macular peeling surgery

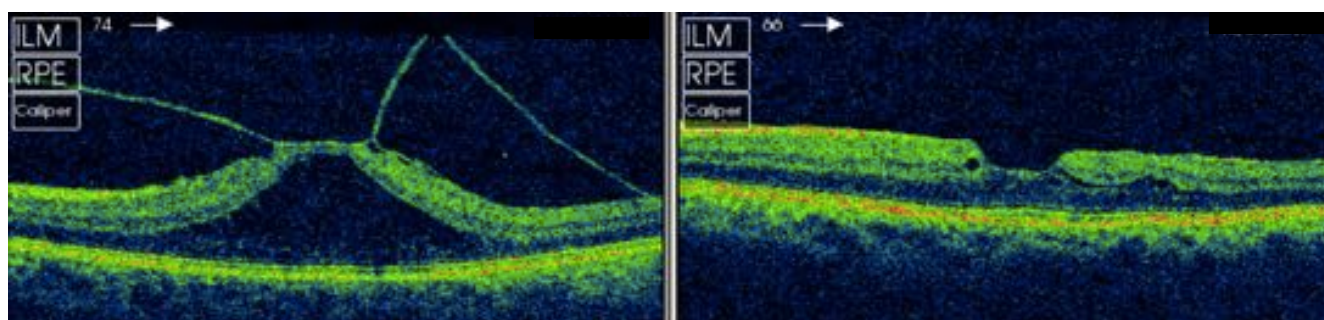
If there is no improvement of your symptoms or they continue to worsen or you have developed side effects from the injection e.g. a macular hole, your ophthalmologist will be offering you to have vitrectomy and macular peeling surgery. This is an operation where the vitreous gel is removed and the adhesion between the vitreous and retina is mechanically released.

The operation is usually performed under local anaesthetic, often with sedation to help keep you relaxed during the surgery. For more information, please also see the 'Vitrectomy' and 'Macular hole' leaflets.

How successful is the treatment?

Ocriplasmin succeeds in releasing the VMT in up to 50% of patients, whereas the surgery succeeds in achieving that in all the patients.

Ocriplasmin however is a smaller, less involved procedure.



OCT scans showing a patient with VMT before treatment (left) and after treatment (right).

What are the side effects of treatment?

Common side effects of ocriplasmin injection include soreness and gritty feeling in the eye, floaters, flashing lights, yellowing of vision and reduced vision. These are usually temporary and last only for a few days.

Common side effect of surgery include soreness, gritty feeling and bruising of the surface of the eye and the development of cataract (in patients who have not had cataract surgery).

For both procedures, more serious side effects include the development of a macular hole or retinal detachment, which would require another surgery. Rarely loss of vision may occur due to severe infection or bleeding in the eye.

Contact details

Royal Eye Unit

Mon-Fri 8.30am to 5pm

0208 934 6404

Moorfields at St Georges' Hospital (Duke Elder Ward)

Mon-Fri 5pm to 8.30am, weekends and Bank Holidays

020 8672 1255 ext 2064/0638