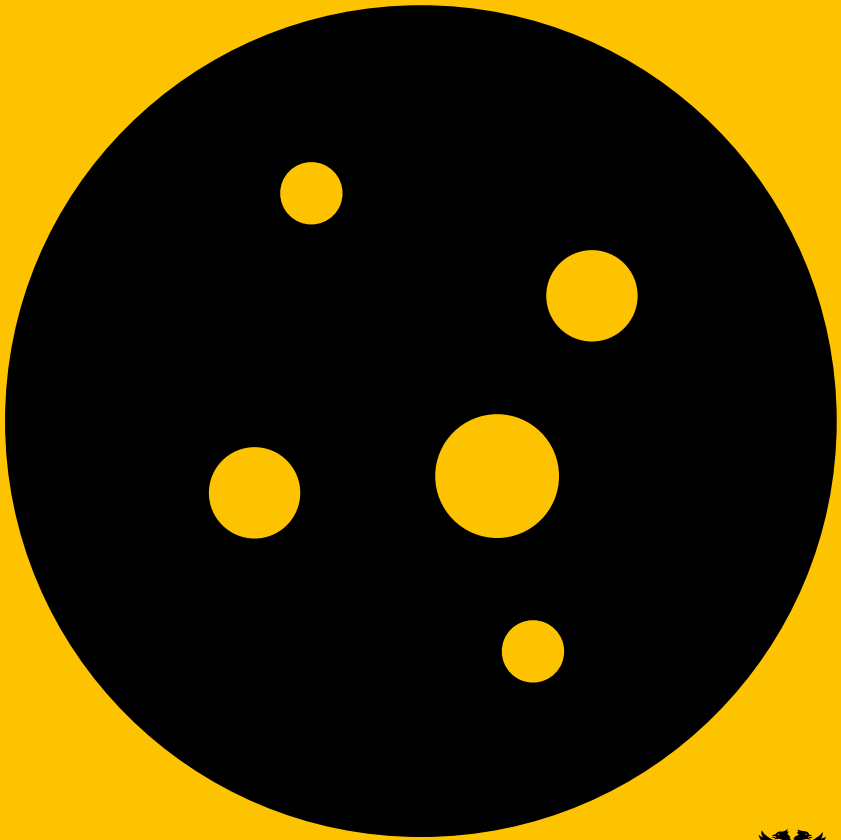


R N I B

See differently

Understanding

Posterior vitreous detachment



The ROYAL COLLEGE of
OPHTHALMOLOGISTS

Contact us

We're here to answer any questions you have about your eye condition or treatment. If you need further information about posterior vitreous detachment or on coping with changes in your vision, then our Helpline is there for you.

Just give us a call on **0303 123 9999** or email us at **helpline@rnib.org.uk** and we'll be happy to speak with you.

RNIB's Understanding series

The Understanding series is designed to help you, your friends and family understand a little bit more about your eye condition.

The series covers a range of eye conditions, and is available in audio, print and braille formats.

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What is posterior vitreous detachment?

Posterior vitreous detachment (PVD) is a condition where your vitreous comes away from the retina at the back of your eye. This detachment is caused by changes in your vitreous gel. PVD isn't painful and it doesn't cause sight loss, but you may have symptoms such as seeing floaters (small dark spots or shapes) and flashing lights.

These symptoms will calm down as your brain learns to ignore them. With time, you should be able to see just as well as you could before your PVD started.

The symptoms of PVD are the same as those of a different eye condition called retinal detachment, which needs prompt treatment to stop you losing part or all of the sight in your eye. Because of this, it's important to have your eyes examined by an ophthalmologist (also known as a hospital eye doctor) or an optometrist (also known as an optician) within 24 hours of noticing any symptoms so that an accurate diagnosis can be made.

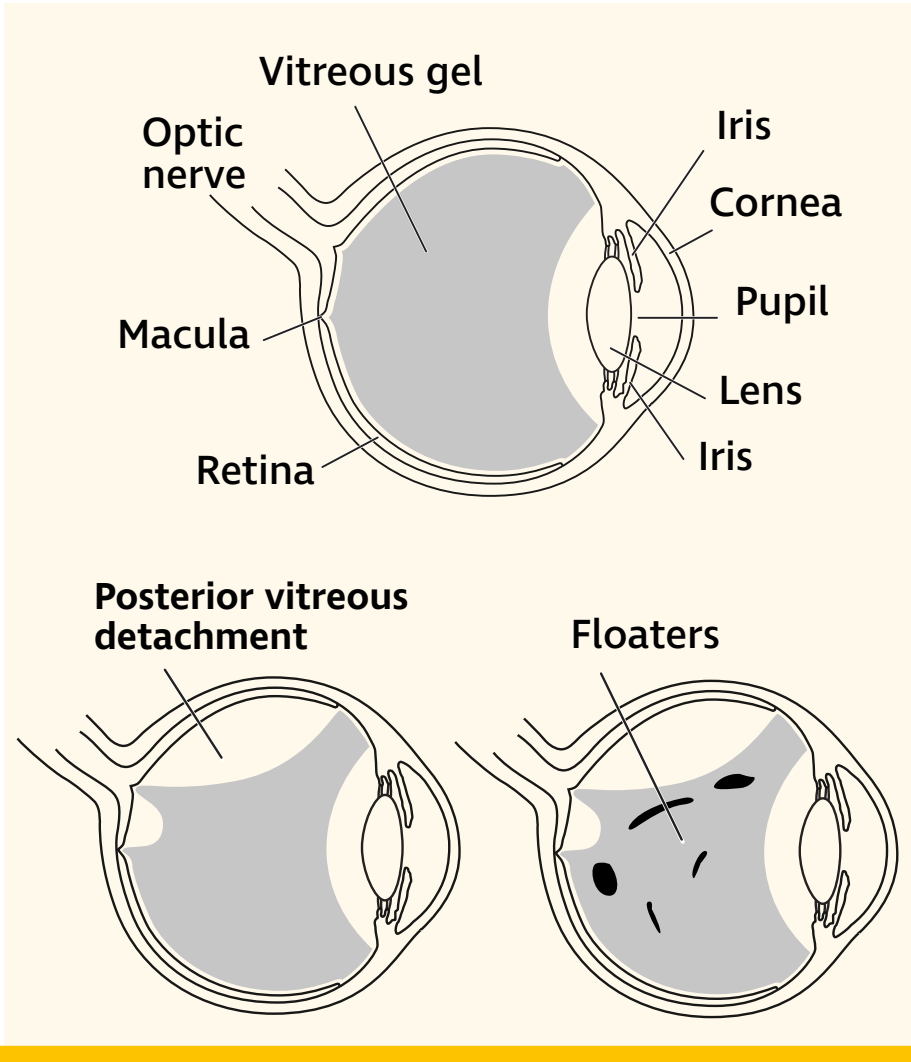
About one in 10 people with PVD develop a retinal tear, which, if left untreated will develop into a retinal detachment. A retinal tear or detachment can be successfully treated if diagnosed early.

Most people diagnosed with PVD will not develop a retinal tear or detachment.



What causes PVD?

Your eye is filled with a clear gel called the vitreous. The vitreous helps to keep your eye's shape. It is made up mainly of water and a protein called collagen.



When you look at something, light passes through the front of your eye through the vitreous and is focused onto the retina at the back your eye. Your retina converts light into electrical signals which are then sent to your brain. Your brain interprets these signals to see the world around you.

As you age, it is common for the vitreous to become more watery and less like a gel. When the vitreous gets too soft and loses its shape, it can come away from the retina and shrink in towards the centre of your eye. These changes are not a sign of another eye health problem. Most people with PVD are over the age of 50 but you can have a PVD in your 40s or at an earlier age if you're short-sighted or if your eye has been injured.

What are the symptoms of PVD?

There are a number of symptoms of PVD:

- Floaters for the first time or more floaters than you had before.
- Flashes of light in your vision that may get worse.
- A large cobweb-like floater appearing across your vision.
- Blurred vision.

As your PVD develops, you may have some or all of these symptoms. You might be very aware of them or not bothered much by them.

Your symptoms may last for a few weeks only, but usually they last about six months. During this time, your floaters and the flashes of light gradually calm down and become less obvious to you. You might be aware of your floaters for up to a year or longer but this is more unusual. This doesn't mean there's anything wrong with your eyes. However, if you're worried about any symptoms that don't go away, speak to your optometrist or ophthalmologist about it.

What medical investigations should I have?

The optometrist or ophthalmologist will check your vision first before dilating your pupils (making them wide) with drops. The drops take about 30 minutes to work and they'll make your vision blurred as well as more sensitive to light.

Your dilated pupils will allow the optometrist or ophthalmologist to see inside your eyes more easily and find out if you've had a PVD, and to check your retina for any holes or tears. They'll use a special microscope called a slit lamp and you'll be asked to look in different directions so that your eyes can be fully examined using the bright light of the slit lamp.

The light from the slit lamp will not damage your eyes. It seems very bright because your pupils are bigger. They'll return to their normal size after about six hours or overnight. You shouldn't drive until the effects of the drops have worn off.



Long-term PVD symptoms

Floaters

Floaters are very common and many people have them, even if they don't have PVD. They're harmless, floating clumps of cells that form in your vitreous as it becomes more watery. You can see them because they cast shadows on your retina when light comes into your eye.

Floaters can be different shapes and sizes – dots that can look like flies, threads, circles, clouds, or cobwebs. You may notice that your floaters move around a lot or they may not seem to move much at all. They may be more obvious to you on a sunny day or when looking at a bright computer screen.

You may only have a few floaters or you may have many of them. Floaters may appear quite suddenly or may increase in number and they may be very frustrating or worrying to you. When they're at their most intense, you might think that your floaters will always interfere with your vision, but for most people, they become less obvious over time as your brain learns to ignore them. If, over time more floaters form in your eye, then this may increase the amount of time it takes for your brain to adjust. You can

help your brain to learn how to ignore your floaters. Some ideas are suggested in the section "How do I cope with my floaters?".

Small flashes of light

When your vitreous pulls away from your retina, your retina reacts to this stimulation by sending a signal to your brain. Your brain processes this signal as a small, short flash of light, which you'll often see more in the dark or dim lighting. These flashes of light won't affect you for as long as floaters, and they will probably become a lot less frequent once the vitreous has fully come away from your retina.

How do I cope with my floaters?

If you have a large floater, moving your eyes gently round in circles may help. This moves the vitreous inside your eyes and can sometimes move the floater out of your direct line of vision so you're less aware of it.

If your optometrist has advised you to wear glasses, wearing these when you need to will help you to see what you're doing more easily. When your vision is clearer, you're more likely to be able to concentrate on the task, rather than on the floaters.

Wearing sunglasses in bright conditions will make your floaters less noticeable. The tinted lenses reduce the amount of light entering your eyes, which means that your floaters cast a fainter shadow on your retina.

If your floaters are distracting you when you're using a computer or tablet, reducing the brightness of the screen may make them less noticeable.

What is the treatment for PVD?

There isn't any medical treatment for PVD and there's no evidence that eye exercises, diet changes or vitamins can help.

You may have heard that it's possible to treat PVD either with a laser or with surgery to remove the vitreous from your eye. Very few ophthalmologists offer laser treatment for floaters, and in the UK it's not a routine treatment. It's very unlikely to be funded by the NHS so you'd usually have to pay for this privately. The laser may make large floaters smaller but it's still not clear whether or not it's safe or makes your vision any better. If you're considering laser treatment, make sure you ask about the risks beforehand.

There is surgery called a vitrectomy where your vitreous is removed from your eye. Although this can reduce your floaters, it's a major operation and there are risks from having this surgery. Because of this, it's not usually offered to people with PVD in the UK.

What activities can I still do with PVD?

Most people with a PVD can carry on with their normal day-to-day activities with no restrictions. Some ophthalmologists advise that high impact exercise should be avoided during the first six weeks after the start of a PVD. This is because your vitreous may not have completely detached from your retina and you may be at greater risk of having a retinal detachment during this time.

There is no evidence either way that any of the following activities will definitely cause any problems with your PVD, but it might be best to avoid:

- Very heavy lifting, energetic or high impact exercises, such as running or aerobics.
- Playing contact sports, such as rugby, martial arts or boxing.
- Inverted positions in activities such as yoga or pilates.

However, you should always ask your ophthalmologist for advice about what activities you should avoid doing and for how long.

If you do participate in any activities like these, you might notice your floaters a lot more. This is because these activities involve body movements that can make your floaters move around more inside your eye. Because of this, you might want to stop activities like these until your brain adapts and learns to ignore your floaters.

You can carry on with daily activities such as walking, gentle exercising, reading, watching TV, cooking and using your computer. There is no evidence to suggest that flying in an aeroplane will harm your PVD or make it worse.

Do other eye conditions have the same symptoms as PVD?

Retinal tear or detachment

In a small number of cases PVD can lead to a retinal tear. This is because the vitreous is more firmly attached in places to the retina. As your vitreous moves away from your retina in PVD, it can pull on your retina, causing it to tear. If a retinal tear isn't treated, it can lead to retinal detachment which can cause sight loss. Retinal tears and detachments are much rarer than PVD alone and only one in 10 people with PVD go on to develop them. Having your PVD examined on the same day or within 24 hours of the start of your symptoms means that your ophthalmologist or optometrist can look for any signs of retinal tear or detachment. For more information about retinal detachment, we've produced a booklet called "Understanding retinal detachment" which you can order by calling our Helpline on **0303 123 9999**.

Floaters without PVD

Floaters are very common and many people have them without having had a PVD or other eye condition, which means they're nothing to worry about. However, sometimes floaters can be a sign of another eye condition such as inflammation in the eye. You should always have your eyes checked as soon as possible by your optometrist or ophthalmologist if you notice new floaters, or an increase in floaters, to make sure there's no other eye condition causing them.

Degenerative vitreous syndrome

Degenerative vitreous syndrome (DVS) is slightly different to PVD because it can cause floaters without the vitreous detaching from the retina. As the vitreous becomes more watery, DVS causes severe floaters that can be frustrating and noticeable for a long time. However, DVS can often turn into PVD when the vitreous begins to move away from the retina. One Clear Vision is an organisation providing information and support for people who have DVS.



Further help and support

If you have questions about anything you've read in this publication, please get in touch with us.

Our Helpline is your direct line to the support, advice and services you need. Whether you want to know more about your eye condition, buy a product from our shop, join our library, find out about possible benefit entitlements, or be put in touch with a trained counsellor, we're only a call away.

It's also a way for you to join RNIB Connect, our community for anyone affected by sight loss. RNIB Connect is free to join and you'll have the chance to meet other people with similar experiences in our helpful, welcoming and supportive community.

Give us a call today to find out how we can help you.

RNIB Helpline
0303 123 9999
helpline@rnib.org.uk

We're ready to answer your call Monday to Friday 8am to 8pm and Saturday 9am to 1pm.

You can also get in touch by post or by visiting our website:

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London WC1H 9NE
rnib.org.uk

Other useful contacts

One Clear Vision
www.oneclearvision.org

We value your feedback

You can help us improve this publication by letting us know what you think about it. Please complete and return the form opposite to:

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WC1H 9NE

You can also email us at
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3. Is there any information you would have found helpful, that was missing?

4. Do you have any other comments about this publication or any aspect of your contact with RNIB?

Information sources

RNIB and The Royal College of Ophthalmologists do all we can to ensure that the information we supply is accurate, up to date and in line with the latest research and expertise.

This publication uses information from:

- The Royal College of Ophthalmologists' guidelines for treatment
- clinical research and studies obtained through literature reviews
- specific support groups for individual conditions
- medical text books
- RNIB publications and research.

For a full list of references and information sources used in the compilation of this publication, email **eyehealth@rnib.org.uk**.

About The Royal College of Ophthalmologists

The Royal College of Ophthalmologists champions excellence in the practice of ophthalmology and is the only professional membership body for medically qualified ophthalmologists.

The College is unable to offer direct advice to patients. If you're concerned about the health of your eyes, you should seek medical advice from your GP or ophthalmologist.

rcophth.ac.uk



If you or someone you know is living with sight loss, we're here to help.

RNIB Helpline

0303 123 9999

helpline@rnib.org.uk

The Sight Advice FAQ answers questions about living with sight loss, eye health or being newly diagnosed with a sight condition. It is produced by RNIB in partnership with a number of other sight loss organisations. sightadvicefaq.org.uk

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