

Vitreous degeneration

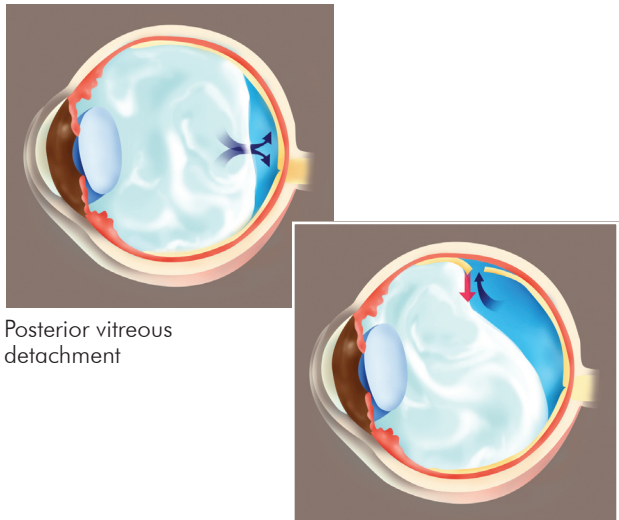
What are Floaters?

The jelly-like substance filling the space between the crystalline lens and the retina is called vitreous humor. This vitreous humor degenerates and liquefies when we get older. Then we start to see floaters. Floaters can be moving opacities of various shapes and sizes (dots, circles, lines or spider-webs). Physiological floaters usually occur when you are looking at a bright homogenous background such as a white wall or the blue sky. The floating opacities are few in number and remain unchanged over time. They represent normal physiological changes of the vitreous humor.

Pathological floaters appear suddenly and may occur in great numbers. They may represent bleeding within the vitreous humor, inflammation of uvea or separation of posterior vitreous humor from retina. If the floaters are accompanied by flashes or visual field defects, these may indicate retinal tear or retinal detachment. We should consult ophthalmologists (eye doctors) immediately to distinguish these conditions.

Flashes, Acute Posterior Vitreous Detachment and Retinal Detachment

As we age, the vitreous humor undergoes the processes of synchysis (liquefying) and syneresis (dehydrating and shrinking). These are normal age-related degenerations. When the vitreous humor contracts and detaches from the retina, this process is called acute posterior vitreous detachment (acute PVD). We will notice sudden onset of floaters and flashes when acute PVD occurs. The floaters can be caused by vitreous opacities or hemorrhages, and flashes are caused by vitreous humor pulling on the retina. An urgent dilated eye examination is essential to exclude retinal tears, which should be repaired with laser as soon as possible. A retinal tear may evolve into retinal detachment in a few hours.



Posterior vitreous detachment

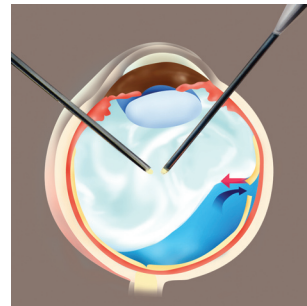
Retinal tear and detachment

What are the Symptoms of Retinal Detachment ?

1. Increase floaters
2. Increase flashes
3. Visual field loss
4. Visual distortion or disturbance

Treatment for Retinal Detachment

Retinal degenerations or tears can be repaired with laser while retinal detachment is treated with surgery. There are two main types of retinal detachment surgery, namely scleral buckle, which is performed around and outside the eyeball and Vitrectomy (with gas or silicone oil injection), which is performed inside the eyeball. Both of the surgeries include laser treatment or cryotherapy.

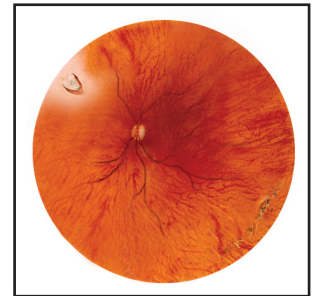


Vitrectomy

Who are at Risk of Retinal Detachment?

1. Middle-age persons when PVD causes retinal tear.
2. Eyes with retinal lattice degenerations, atrophic holes or horse-shoe tears.

3. High myopes (higher than -6.0 Dioptres).
4. Ocular or orbital trauma.
5. Previous intraocular surgery (e.g. cataract or glaucoma surgery).
6. Certain inherited diseases (e.g. Marfan's Syndrome, Stickler's Disease).
7. Family history of retinal detachment.
8. Diabetic retinopathy.
9. Retinopathy of prematurity, etc.



Peripheral retinal degeneration and retinal tear

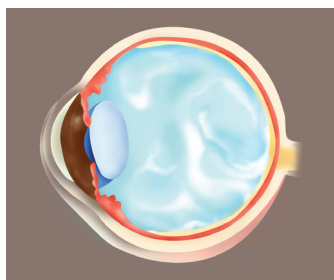
Regular Eye Examinations can Preserve Vision

Please schedule regular eye examinations with your ophthalmologists.

For appointment, please contact us at :
 2 Village Road, Happy Valley, Hong Kong
 Tel : 2835 8880 or 2835 8890
 Fax : 2892 7510
 E-mail : eye@hksh.com
[http:// www.hksh.com](http://www.hksh.com)

何謂飛蚊症？

我們的眼球內有一些啫喱狀的組織充塞於晶體和視網膜之間，稱為玻璃體。隨著年紀增長，玻璃體會逐漸退化和液化，令我們看東西的時候看見一些移動的黑影，俗稱「飛蚊」。飛蚊可以有不同大小，形狀可以是小點、圓形、線狀或網狀。生理性的飛蚊，黑影數目較少，通常在凝望單色的背景時(如白色的牆壁或藍色的天空)，才會出現。這只是表示眼球的玻璃體出現正常的生理變化，並無大礙。

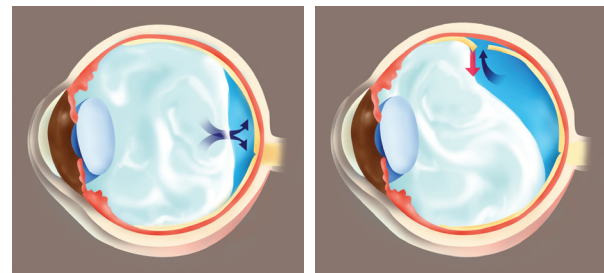


玻璃體液化和退化

病理性的飛蚊，黑影數目通常比較多，而且突然出現，可能表示眼球內出血、虹膜炎或玻璃體收縮而引致玻璃體和視網膜分離。如果有伴隨「閃光」和視野缺損，就可能是視網膜破裂或脫落的徵狀。如看見飛蚊，應馬上找眼科醫生檢查來區別其成因。

閃光、急性玻璃體後結膜剝離和視網膜脫落

玻璃體液化和脫水收縮，是因年齡增長所致的正常退化現象。當玻璃體收縮，並且和眼底的視網膜分離，就會導致急性玻璃體後結膜剝離，病者會突然看見飛蚊和閃光。看見飛蚊的原因可以是玻璃體渾濁或出血，而看見閃光則是由玻璃體拉扯視網膜所致。如突然看見飛蚊和閃光，就必須馬上找眼科醫生作放瞳檢查，因為玻璃體後結膜剝離可能引致視網膜破裂，需要儘快以激光手術修補，否則視網膜可能會在數小時內脫落。



玻璃體後結膜剝離

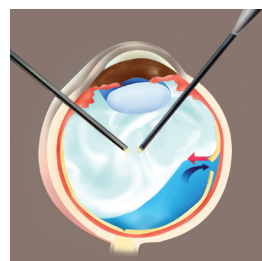
視網膜撕裂及脫落

視網膜脫落的徵狀

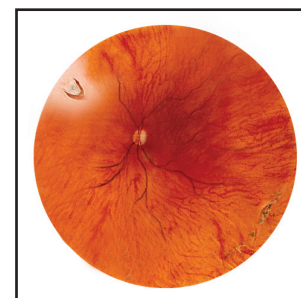
1. 飛蚊增加
2. 閃光增加
3. 損失部份視野
4. 視覺影像變形

視網膜脫落的治療

視網膜退化或撕裂可以用激光修補，但視網膜脫落就要以手術治療。有關手術主要分為兩種，一種是在眼球外施行的鞏膜外壓術，另一種是眼球內的玻璃體切除術(輔以氣體或硅酮注射)，兩種手術都會包括冷凍療法或視網膜激光。



玻璃體切除術



視網膜邊緣退化和裂孔

哪些人較容易患視網膜脫落？

1. 中年以後，玻璃體後結膜剝離引致視網膜撕裂
2. 視網膜有格子狀退化、萎縮性穿孔或馬蹄形撕裂
3. 深近視(近視度數600度以上)
4. 眼睛曾受外傷
5. 曾經接受眼內手術(如白內障、青光眼等手術)
6. 患有某些遺傳性疾病(如Marfan綜合病徵、Stickler綜合病徵等)
7. 有視網膜脫落的家族病史
8. 糖尿病性視網膜病變
9. 早產嬰兒視網膜病變等

預防眼疾、及早治療

請緊記定期找眼科醫生檢查眼睛

專科診症，歡迎致電本中心預約

香港跑馬地山村道二號

電話：2835 8880 或 2835 8890

傳真：2892 7510 電郵：eye@hksh.com

<http://www.hksh.com>

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養和醫院
HONG KONG SANATORIUM & HOSPITAL

飛蚊症和視網膜脫落 Floaters & Retinal Detachment

眼科部

Department of Ophthalmology