Diabetic Retinopathy

إعتلال الشبكية لدى مرضى السكّري







Introduction

- ▶ Diabetic patients can have complications with retinal disease due to high blood sugar, this is called Diabetic Retinopathy.
- ▶ The retina can be compared to the film in a camera and transmits the images through the nerve to the brain. The retina has very fine blood vessels that supply it with nutrients and oxygen.
- ▶ In Diabetic Retinopathy these blood vessels are damaged and can be blocked or leak fluid. This, combined with bleeding, may damage the cells of the retina irreversibly.
- In more severe disease, fragile vessels grow on the retina. These new vessels sometimes bleed in the eye and can cause blurring of the vision.

Retionopathy can affect the macula, (central part of the retina) causing Diabetic Maculopathy or the outer peripheral retina, or both. It is much more serious if the macula is affected as well.

If you have high blood pressure in addition to diabetes, the condition can be more severe.

Types of **Diabetic Retinopathy**

Non Proliferative Diabetic Retinopathy

Initially there are only some tiny microaneurysms, localized enlargements of the vessels; tiny leaks of fluid and blood in various parts of the retina. The Ophthalmologist can see these as tiny "dots" and "blots" on the retina when they examine the back of the eye. Your vision is not usually affected but you will need careful follow up.

Proliferative Diabetic Retinopathy

New blood vessels grow in some part or parts of the retina at this stage, they are delicate and can easily bleed which can damage the retina. Without laser treatment, vision is likely to become seriously affected by bleeding. Parts of the retina may also detach from the back of the eye.

Diabetic Maculopathy

This is when the central part of the retina is affected. Leaking vessels in this area can cause swelling of the retina and severely compromise vision.

Treatment might vary from laser treatment to injections or surgery with a vitrectomy.





Exudates are deposits in the retina from leaky vessels. Haemorrhages in the retina of varying sizes. Microaneurysms.

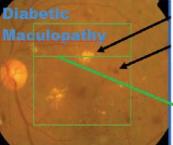


Optic Nerve with abnormal new vessels that have bled. Scars from previous laser treatment.

Vitreous haemorrhage in front of the retina.

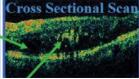


End stage proliferative Diabetic Retinopathy with fibrousbands. Retinal Detachment.



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Exudates (yellow) and haemorrhages in the central retina.



Cross sectional scan showing thickening of the macula and exudates.

Can it be **prevented?**

There is strong evidence that improving control of diabetes has a long term beneficial effect on the eyes, slowing the rate of progression of diabetic retinopathy. Hence, making sure your blood sugar is well controlled is a crucial part of looking after your eyes. It is also important to ensure your blood pressure is regularly checked and treated if elevated. The combination of smoking and diabetes has severe health effects throughout your body.

What can I do?

Treatment can prevent loss of vision and blindness in most cases. Therefore, if you have diabetes it is vital that you have regular eye checks to detect retinopathy before your vision becomes seriously affected.



Moorfields Dubai



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Opening hours:

Saturday to Thursday, 8.30am to 5.30pm, for information and advice on eye conditions and treatments from experienced ophthalmic trained staff.



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